

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



United States
Department of
Agriculture

Forest Service

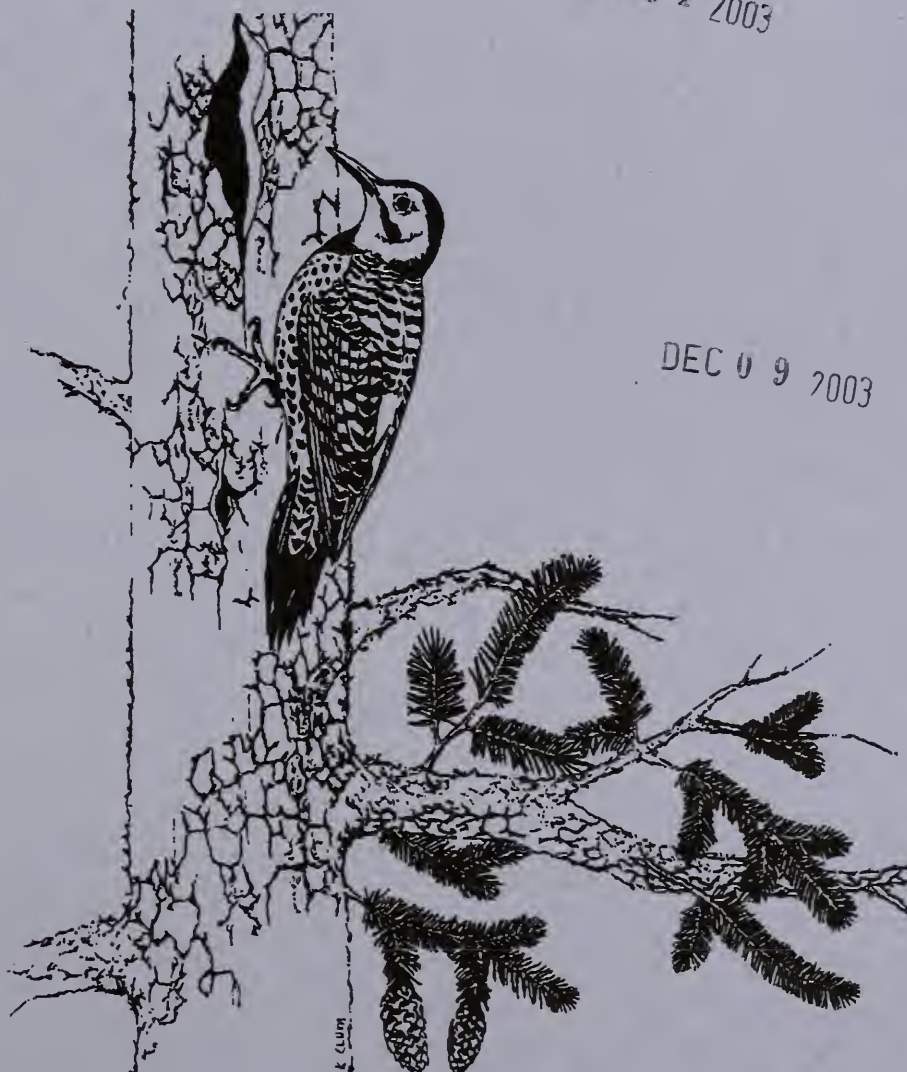
Tongass
National
Forest
R10-MB-496

September 2003



Woodpecker Project Area

2003 Record of Decision



NOV 24 2003

DEC 09 2003

USDA LIBRARY
NOV 13 A 1:34





United States
Department of
Agriculture

Forest Service

Tongass
National
Forest
R10-MB-496

September 2003

Woodpecker Project Area

2003 Record of Decision





United States
Department of
Agriculture

Forest
Service

Alaska Region
Tongass National Forest

648 Mission Street
Ketchikan, AK 99901
Phone: (907) 225-3101
Fax: (907) 228-6215

File Code: 1950

Date: September 12, 2003

Dear Reader:

Here is your copy of the 2003 Record of Decision (2003 ROD) for the Woodpecker Project Area on the Petersburg Ranger District, Tongass National Forest. The 2003 ROD documents my decision and the rationale considered in reaching the decision to harvest approximately 10.9 million board feet of timber and to build approximately 4.8 miles of classified road and approximately 1.3 miles of temporary road to facilitate the harvest.

The August 13, 2001 Record of Decision for this project was reversed on appeal because of some data discrepancies. A supplemental information report was prepared to analyze whether these discrepancies influenced the effects analysis. This review found that only minor changes were necessary and that these changes did not affect the analysis displayed in the Woodpecker Project Area Final EIS. A Record of Decision signed for the Woodpecker Project Area on December 24, 2002 (2002 ROD) included only those activities within the roaded portion of the project area. No appeals were received on the 2002 ROD. At that time, the Forest Service was operating under a court injunction that prohibited timber harvest and road building in roadless areas until the completion of the final supplemental environmental impact statement (SEIS) for the Forest Plan. The SEIS was signed on February 24, 2003, so another decision can be made regarding the roadless portion of the proposal.

The Woodpecker Project Area is partly within the Crystal Inventoried Roadless Area on the Tongass National Forest. The Roadless Area Conservation Rule (Roadless Rule, 36 CFR 294.10, January 12, 2001) generally prohibits timber harvesting and road building in roadless areas with a period of transition for the Tongass. This transition period makes an exception for projects where a notice of availability for a draft environmental impact statement was published prior to January 12, 2001. Since the notice of availability for the Woodpecker project was published on August 18, 2000, this project is exempted from the prohibitions in the Roadless Rule. The Woodpecker project is consistent with the Tongass National Forest Land and Resource Management Plan (Forest Plan) and the Forest Plan SEIS.

This decision is subject to appeal under 36 Code of Federal Regulations Part 215. The appeal must be filed within 45 days of the date that legal notification of this decision is published in the *Juneau Empire*, the newspaper of record. The Right to Appeal information and the earliest effective date of implementation for the decision are also specified.

If you would like a copy of the Woodpecker Final EIS (2001) and /or the 2002 ROD and Summary, please contact Cynthia Sever, Woodpecker Project Team Leader, P.O. Box 1328, Petersburg, Alaska 99833; e-mail address: csever@fs.fed.us; or call (907) 772-3871. Copies of these documents are also available at the Forest Service office in Petersburg, Alaska.

Sincerely,

FORREST COLE
Forest Supervisor



Woodpecker Project Area

2003 Record of Decision

**Tongass National Forest
Petersburg Ranger District
USDA Forest Service
Alaska Region**

Lead Agency: Tongass National Forest
648 Mission Street
Ketchikan, Alaska 99901

Responsible Official: Forrest Cole
Forest Supervisor
Tongass National Forest

For Further
Information Contact: Patricia Grantham, District Ranger
or
Cynthia Sever, Interdisciplinary Team
Leader
Tongass National Forest
PO Box 1328
Petersburg, Alaska 99833
(907) 772-3871

Woodpecker Project Area 2003 Record of Decision

Introduction

This Record of Decision (ROD) documents my decision to implement activities from the Woodpecker Project Area Final Environmental Impact Statement (Final EIS) published in August 2001. This decision augments the Record of Decision signed for the Woodpecker Project Area on December 24, 2002. The 2002 Record of Decision (2002 ROD) included only the activities within roaded areas as defined by the U.S. District Court, District of Alaska in *Sierra Club v. Rey* (J00-0009 CV (JKS)). The activities in the 2002 ROD included timber harvest units, temporary road construction, dispersed recreation sites, and parking turnouts. This Record of Decision would implement timber harvest and units and roads within areas that were considered unroaded at that time, including those activities within the Crystal Inventoried Roadless Area. This is consistent with the Roadless Area Conservation Rule (36 Code of Federal Regulations (CFR) 294.14(d)) which allows projects on the Tongass National Forest to be implemented if a notice of availability for a draft environmental impact statement that includes timber harvest or road construction in an inventoried roadless area has been published in the Federal Register prior to January 12, 2001. The notice of availability for the Woodpecker Project Area Draft Environmental Impact Statement was published on August 18, 2000.

The Woodpecker Project Area is located on Mitkof Island in southeast Alaska, approximately 27 miles southwest of Petersburg, Alaska, on the Petersburg Ranger District of the Tongass National Forest (Figure ROD-1). This project area, which is approximately 32,590 acres, is adjacent to Sumner Strait and the Wrangell Narrows. This decision includes the specific location and design of timber harvest units and roads, and resource protection requirements. Timber from this decision may be sold in multiple sales of varying sizes. In addition, this decision includes the implementation of road management objectives, including intended use and maintenance levels.

Decision

This Record of Decision documents my decision to implement forest management activities in the Woodpecker Project Area. My decision consists of:

- the location and method of timber harvest, road construction and reconstruction, log transfer facilities, and silvicultural practices,
- road management objectives,
- mitigation measures and monitoring requirements, and

2003 Record of Decision

- whether there may be a significant possibility of a significant restriction on subsistence uses.

I have decided to issue another Record of Decision for the Woodpecker Project Area that selects the timber harvest units and road construction within the unroaded areas as analyzed in Alternative 6 of the Woodpecker Project Area Final EIS and to authorize the actions necessary to implement this decision. The combination of these activities with the activities approved in the 2002 Record of Decision result in the same effects to the environment as determined for Alternative 6, which are fully disclosed in the Woodpecker Project Area Final EIS.

The timber harvest units and road construction for this decision include:

- Units 88, 88b, 90, 90a, 90c, 90d, 90e, which are entirely within the Crystal Inventoried Roadless Area.
- Units 109, 110, 117a, 117b, 117c, 117d, 118, 119, 119a, 122, 122a which are all or partially outside the area which is 1200 feet from existing roads which was defined as unroaded for the injunction associated with the Forest Plan SEIS.
- Unit 35a at the end of Road 6245 which is partially within the Inventoried Roadless Area and the temporary road needed for access.
- The portion of Unit 98 that is within the Crystal Inventoried Roadless Area.
- Classified Road 40822 and Road 40821 and associated temporary roads needed to access the harvest units.
- The extension of Road 6282 to create a loop road with Road 6245. The section of this road that was part of the 2002 Record of Decision would be constructed as a classified road instead of a temporary road.

This decision is based on the environmental analysis in the Woodpecker Project Area Final EIS (August 2001) and takes into consideration the comments received on the Draft EIS, the issues raised on the appeal of the 2001 Record of Decision, the supplemental information report prepared in 2002, the 2002 Record of Decision, and all comments received prior to the date of this decision. This decision meets the purpose and need for the project and is consistent with the 1997 Record of Decision, as amended, for the Tongass National Forest Land and Resource Management Plan (Forest Plan) and the 2003 Record of Decision for the Supplemental EIS for the Forest Plan (Forest Plan SEIS). The Forest Plan was developed under the 1982 planning regulations (36 CFR 219). The Forest Service also elected to prepare the SEIS under these regulations.

Highlighted Features of this decision:

- 1) Timber will be harvested from approximately 900 acres in the project area. This harvest will provide an estimated 10.9 million board feet (mmbf) [22,296 hundred cubic feet (ccf)] of sawtimber and utility volume based on estimates of unit volume (actual cruised volume may vary). Design features

and mitigation measures for the 20 harvest units are described in detail on the unit card narratives in the Appendix of this Record of Decision. Of these harvest units, four units totaling 100 acres will be managed as two-aged stands with a retention of 20 to 30 percent of the stand basal area. Sixteen units totaling 800 acres will be managed as uneven-aged stands with the first entry retaining 50 to 75 percent of the stand basal area.

- 2) Approximately 4.8 miles of classified roads designed for long term use will be constructed. Approximately 1.3 miles of temporary roads will be constructed to facilitate harvest within the units. All of the temporary roads constructed will be decommissioned as soon as practicable after timber harvest activities are completed. Decommissioning of roads that are not needed for long-term management will include stabilization and restoration to a more natural state. To achieve this, actions may include blocking the entrance to a road, installing waterbars, removing culverts, restoring vegetation, and reestablishing former drainage patterns.
- 3) An existing log transfer facility will be used for timber transport, or the timber may be transported by road and processed in Petersburg. There may be a floating logging camp to facilitate the timber harvest, but no land-based camp is being considered at this time. The operator of the camp will be responsible for securing appropriate permits from state and federal agencies.
- 4) This Record of Decision incorporates the Forest Plan standards and guidelines, project design elements, and mitigation measures to reduce or eliminate adverse environmental effects of timber harvest specified in the Woodpecker Project Area Final EIS. These mitigation measures are listed in Chapter 2 and in Appendices B and D of the Woodpecker Project Area Final EIS. Chapter 2 also contains the implementation and effectiveness monitoring planned to determine how well resource management objectives have been met.
- 5) The direct effects from this decision combined with the 2002 ROD do not present a significant possibility of a significant restriction of subsistence uses of any wildlife, fish and shellfish, marine mammals, other foods, and timber resources in the project area. The potential foreseeable future and cumulative effects from implementing the Forest Plan, including the selection of the activities to be implemented, do not present a significant possibility of a significant restriction of subsistence uses of resources other than deer. However, there may be a significant possibility of a significant restriction of subsistence use of Sitka black-tailed deer based on projected past, present and reasonably foreseeable activities in the Woodpecker Project Area. This is true for any alternative, including the no-action alternative. Measures for minimization of impacts to subsistence resources suggested through agency and public scoping have been incorporated into the design elements of the Selected Alternative. A subsistence hearing was held in Petersburg, Alaska,

2003 Record of Decision

which is in the vicinity of the project area, to determine the extent of the use of the area for subsistence resources.

Reasons for the Decision

In making this decision, I considered the many issues raised during the development and scoping of this project. These issues were raised in comments on the Woodpecker Project Area Draft EIS, in the appeal of the 2001 Record of Decision, and during a public teleconference to discuss the results of the supplemental information report. Many divergent public and agency opinions were expressed during the analysis. I took into account competing interests and values of the public. These comments have helped me make a better informed decision. I have considered all views that have been expressed, and have used these contributions where feasible and consistent with the purpose and need of the project.

1. The Selected Alternative provides a beneficial mix of resources for the public within the framework of the existing laws, regulations, policies, public needs and desires, and capabilities of the land, while meeting the stated purpose and need for this project. This decision is suited to this project area at this time. This project provides the opportunity to provide wood fiber to society, supports the part of the local economy that is based on timber resources, and still protects the other resources within the project area. Providing an even flow of timber products, along with resource protection, is one of several multiple-use goals of the Forest Plan (see Chapter 2 of the Forest Plan). Without obtaining decisions on environmental analyses in a timely manner, an even flow of timber products cannot be obtained (see Appendix A of the Woodpecker Project Area Final EIS).
2. This project has been accomplished with thorough public involvement and has gained local public support. I acknowledge that some comments opposed this project (and some opposed any timber harvest on all National Forest System land), and some recommended that the no-action alternative or Alternative 3 be chosen. However, in my reevaluation of the previous decision, I decided that implementing the rest of the timber harvest and adding the construction of the roads from Alternative 6 of the Woodpecker Project Area Final EIS was warranted for this project for the reasons outlined above and below.
3. During the environmental analysis, I recognized that less than complete knowledge exists about many relationships and conditions of wildlife, fish, forests, jobs, and communities. The ecology, inventory, and management of a large forest area is a complex and developing science. The analysis of wildlife species prompts questions about population dynamics and habitat relationships. The interaction between resource supply, the economy, and communities is not an exact science.
4. The data and level of analysis used in the EIS are commensurate with the magnitude of the possible impacts (40 Code of Federal Regulations (CFR)

1502.15). When encountering a gap in information, the interdisciplinary team (IDT) took one of two approaches: (1) the missing information was collected, or analysis necessary to identify important relationships was conducted, or (2) the IDT concluded that although the missing information would have added precision to estimates or better specified a relationship, the basic data and central relationships are sufficiently established in the respective sciences so that new information would be very unlikely to reverse or nullify understood relationships. Where relevant, the project analysis tiered to the information from the Forest Plan (40 CFR 1502.20).

5. I have carefully considered the timing of this decision in view of ongoing changes in agency regulations and ongoing litigation. The previous decision (2002 ROD) to modify the Selected Alternative even though the analysis proved to be valid was made to provide more timely timber sale offerings on Mitkof Island. The timing of this 2003 decision is affected by recent changes in regulations and ongoing appeals and litigation. Some of the factors I considered in making this decision include:

- The 1997 Forest Plan allows for the activities approved by this decision to take place. These activities are further supported by the analysis and decision for the Forest Plan SEIS.
- In recent years, analysis requirements stemming from litigation and administrative actions have created delays in normal timber sale planning schedules. Many projects have been cancelled or deferred long-term due to constantly changing legal and regulatory requirements and limitations. Other projects that were started in the last few years, and were near completion but were deferred due to the changing legal and policy environment, are being re-started with the associated one- to two-year timeline to completion. Since the Woodpecker Project Area Final EIS and the supplemental information report have been recently completed, this project presents an excellent opportunity to make additional harvest volume available to the timber industry.
- The Tongass National Forest will continue to be managed in compliance with Section 101 of the Tongass Timber Reform Act of 1990 (TTRA), which modified the Alaska National Interest Lands Conservation Act (ANILCA). This states that the Secretary of Agriculture "...shall, to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand for timber from such forest and (2) meets the market demand from such forest for each planning cycle." In order to provide a steady flow of timber harvest volume, timber sale projects need to be completed through the NEPA process each year to meet current and future market demand.
- This project has received good support from the local community and is relatively uncontroversial. The Petersburg City Council passed a resolution on February 17, 1998 in support of small timber sales from National Forest Service System lands. On June 3, 2002, another

2003 Record of Decision

resolution was passed by the City Council to support the Southeast Timber Task Force proposal which addresses the issue of sustaining a viable forest products industry in Southeast Alaska. A third resolution, passed on August 9, 2002, supported the No-action Alternative (Alternative 1) of the Forest Plan SEIS, which would allow the management activities currently authorized by the Forest Plan to continue.

6. My decision conforms to the Forest Plan and the principles of sound National Forest management. I have considered the need to help provide a sustained level of timber supply to meet annual and Forest Plan planning cycle market demand, and to provide diverse opportunities for natural resource employment, consistent with multiple use and sustained yield of all renewable forest resources. The timber volume from this project area will help meet the needs for society and for a steady supply for the timber industry in Southeast Alaska.
7. The unit designs and harvest prescriptions in this decision reflect the best possible balance of the physical conditions and economic opportunities characteristic of this project area. These conditions cannot be directly compared to projects in different locations with different land use designations and different environmental and social concerns. The terrain, stand conditions, scenery, economic opportunities and the Forest Plan guidance for the Woodpecker Project Area are, in their combination, unique to this area.
8. The effects to high value deer winter habitat were taken into consideration. Much of the 3,370 acres of high value deer winter habitat in the Woodpecker Project Area is already unavailable for timber harvest because of Forest Plan land use designations or standards and guidelines. Other stands available for timber harvest were not proposed for timber harvest for this entry due to concerns about availability of high value deer winter habitat, as discussed in the Woodpecker Project Area Final EIS. This decision does propose harvest within high value deer winter habitat in Units 122, Unit 122a, and portions of Units 90 and 90d. The effects of harvesting these units will be reduced by using uneven-aged management with a silvicultural prescription of group selection with 75 percent tree retention. This prescription will remove trees in two-acre patches. Combined with timber harvest with the same silvicultural prescriptions for Units 121 and 161a from the 2002 Record of Decision, this will be an estimated total of 35 acres harvested in two-acre patches within the high value deer winter habitat. The harvested patches may have beneficial effects by creating more forage adjacent to good winter cover.
9. Many comments were received about road access for non-timber harvest uses, the effects of road construction on other resources, and the lack of road maintenance funds. These comments were carefully considered. Road construction facilitates the harvest and transport of timber, and is safer and more economically feasible and less dependent on optimum weather conditions than the use of helicopters.

10. About 4.8 miles of classified roads designed for long term use and 1.3 miles of temporary roads will be constructed. Of the 4.8 miles of classified roads, 1.8 miles will remain open for use. All classified roads, whether to be left open or closed, are part of the National Forest road system that has been identified to be necessary for current and future management, including timber harvesting. All temporary roads will be decommissioned and returned to a more natural state. This will reduce the amount of road maintenance needed for the area, as explained in the Mitkof Island Road Analysis.
11. The two primary recreational uses of the Woodpecker Project Area are deer hunting and recreational driving. The area is also used for subsistence deer hunting purposes. The construction of a loop road by extending Road 6282 to connect to the Woodpecker Road (Road 6245) and the previous decision (2002 ROD) to upgrade the Woodpecker Road and the Snake Ridge Road for all vehicle access (Maintenance Level 3) will also improve the driving experience and public access. These improvements will also reduce the potential for conflicts between passenger vehicles and log truck traffic.
12. The existing road system provides access to many of the areas currently favored for activities such as hiking and hunting. About four percent of the acres that are currently in semi-primitive recreation settings will change to a roaded setting in the Woodpecker Project Area with the construction of Roads 40821 and 40822. This is within the direction for Forest Plan land use designations that allow development activities. About 8,445 acres within the project area, in addition to areas adjacent to or near the project area, will continue to provide opportunities for these semi-primitive recreation types of activities.
13. The Woodpecker Project Area includes about two-thirds of the 18,320-acre Crystal Inventoried Roadless Area. The activities associated with this decision will not substantially alter the wilderness characteristics of the area or its eligibility for inclusion in the National Wilderness Preservation System. Partial harvest will occur on 370 acres within the roadless area. There will be two miles of classified road construction designed for long-term use and 0.8 miles of temporary road construction within the roadless area. Of this road construction, 0.8 miles of classified road will remain open for public use after timber harvest. The temporary roads will be decommissioned after timber harvest and the remaining 1.2 miles of classified roads will be closed and put into storage. These acres do not contribute significantly to the wilderness character of the area because of the proximity to the sights and sounds of the existing road system. Due to the mountainous terrain, habitat types, and current wildlife and human uses, the portion of the roadless area containing the most important roadless area values is located outside the Woodpecker Project Area to the north, around Crystal Mountain and Blind Slough.
14. All of the timber harvest units that are included in this decision employ a method of partial harvest that will leave a percentage of the forest stand remaining after timber harvest. Uneven-aged harvest prescriptions that retain at least 50 percent of the trees per acre within stands are prescribed for 89

2003 Record of Decision

percent of the timber harvest acres. The rest of the units will have green tree retention of 20-30 percent, which will create two-aged stands with large legacy trees and stand structure. A 200-year rotation for even-aged management stands and the cutting cycles scheduled for uneven-aged management stands that were prescribed for this project area will help maintain the values of the area for deer, marten, and recreation. This extended rotation combined with tree retention will; (1) enable the harvested stands to advance beyond the stem exclusion phase and retain large trees longer, (2) create more forage for deer under the canopy, (3) benefit cavity nesters and marten, and (4) retain a more natural-appearing landscape. The prescriptions chosen are based on consideration of many factors which are described in Chapter 3 of the Final EIS and on a unit-by-unit basis in the Appendix of this ROD.

15. Significant adverse effects to soils, water, or fisheries are not anticipated due to the locations of the roads and units and the implementation of the Forest Plan standards and guidelines.
16. One issue that was raised during the appeal of the August 2001 decision for this project was the perception that the Forest Service is targeting specific tree species for harvest, in particular, high value Alaska yellow-cedar and western redcedar. The area with the most western redcedar, along the Snake Ridge Road, was avoided for this entry (except for several small units designated for small sales) due to previous harvest and the high amount of personal use timber harvest in this area. Western redcedar does occur as a small percentage of the stand in other units. The percentages of Alaska yellow-cedar and western redcedar to be harvested will not be disproportional to their natural stand composition. Details are provided in the silvicultural prescriptions, which are filed in the project planning record.
17. Windthrow has been, and will continue to be, a natural disturbance in the project area. Windthrow risk was determined using the best possible information. Measures to reduce windthrow are listed on the activity cards in Appendix B of the Final EIS, and in the Appendix of this ROD. This leads me to conclude that the unit locations, designs, and harvest prescriptions used will reduce the possibility of catastrophic windthrow. Much of the area that is exposed to severe winds, such as the areas adjacent to Sumner Strait, will not be harvested in this entry because they are either located within small old-growth habitat reserves and are unavailable for timber harvest, or they have been previously harvested, in some cases to salvage blowdown trees.
18. The effects on marten habitat capability will be reduced by leaving large trees and stand structure within all units with high value marten habitat. These measures will meet or exceed the Forest Plan standards and guidelines.
19. Wildlife travel corridors are retained between the medium old-growth habitat reserves on Mitkof Island and adjacent areas with the placement of the small old-growth habitat reserves on the perimeter of the project area. The area within the 1,000-foot beach fringe that is not available for commercial timber

harvest according to the Forest Plan is mostly in old-growth forest, which further provides connectivity. This is strengthened by the modification of the small old-growth habitat reserve adjacent to the Wrangell Narrows, as described in Non-significant Forest Plan Amendment, Appendix 1 (2002 Record of Decision).

20. The Visual Quality Objectives adopted by the Forest Plan will be met or exceeded. The effects to scenery from the Visual Priority Travel Routes and Use Areas designated in Appendix F of the Forest Plan have been reduced by unit selection, harvest prescriptions, unit design, and an extended timber harvest rotation. Timber harvest viewed from Sumner Strait, Wrangell Narrows, South Blind Slough, and Crystal Mountain will not be evident to the casual observer, or will appear as a natural occurrence within the surrounding area.
21. This decision allows the use of existing log transfer facilities as permitted. Either the Woodpecker Cove LTF or Olson's Landing LTF may be used, or the timber may be processed in Petersburg. Permitting the use of rafts instead of barges is the responsibility of the State of Alaska. The purchaser of the timber sale is required to submit a request to the State for all applicable permits associated with either activity. All log transfer facility use will be monitored to ensure that bark accumulation remains within thresholds specified by the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) permit and the State of Alaska.

Purpose and Need for the Project

The purpose and need for this project is to respond to goals and objectives identified by the Forest Plan and to move the project area toward the desired future condition for all resources. The Forest Plan identifies the following goals and objectives, which are applicable to the Woodpecker Project Area:

- Manage the timber resource for production of sawtimber and other wood products from suitable lands made available for timber harvest on an even-flow, long-term sustained yield basis and in an economically efficient manner.
- Seek to provide a timber supply sufficient to meet the annual market demand for the Tongass National Forest and the demand for the planning cycle.
- Provide Forest visitors with visually appealing scenery in areas along the Alaska Marine Highway, State highways, major forest roads, and from popular recreation places; recognize that in other areas where the landscape is altered by management activities, the activity may visually dominate the characteristic landscape.

2003 Record of Decision

- Provide a range of recreation opportunities consistent with public demand, emphasizing locally popular recreation places and those important to the tourism industry.
- Maintain a Forest-wide system of old-growth forest habitat to sustain old-growth associated species and resources and ensure that the reserve system meets the minimum size, spacing, and composition criteria identified in the Forest Plan.
- Provide a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska; support a wide range of natural resource employment opportunities within local communities.
- Develop and manage roads to support resource management activities and to provide access for forest users.

Public Involvement

Public involvement has been instrumental in the identification and clarification of issues for this project. This has been helpful in the formulation of alternatives and has assisted me in making a more informed decision for the Woodpecker project. Public meetings, Federal Register notices, newspaper and radio news releases, open houses, the Tongass National Forest Schedule of Proposed Actions, and group and individual meetings were used to solicit input for this project.

Mitkof Landscape Design: The possibility of a timber harvest project in this area was identified in the Mitkof Landscape Design in 1995 and documented in the letter of recommendation for projects on Mitkof Island.

Scoping Letters: In June 1999 and January 2000, scoping letters were sent to everyone that requested to be on the project mailing list.

Notice of Intent: A Notice of Intent to Prepare an Environmental Impact Statement was published in the Federal Register on January 18, 2000.

Open Houses: Multiple open houses and public meetings were held in Petersburg and Kake during the environmental analysis process in 1999, 2000, and 2001.

Federally-recognized Tribal Governments: The Petersburg Indian Association, the Organized Village of Kake, and the Wrangell Cooperative Association, which are the tribal governments within or near the Petersburg Ranger District, were consulted to identify any potential impacts or concerns during the project analysis and development of alternatives.

Public Comment received for the Draft EIS: Availability of the Draft EIS was announced in the Federal Register on August 18, 2000, with a due date for public

comments listed as October 15, 2000. This document was available at public libraries and Forest Service offices throughout Southeast Alaska and copies were mailed to everyone who requested them. The Forest Service responses to the letters received during the comment period were included in the Final EIS (Appendix C).

Subsistence Hearing: In accordance with Section 810 of the Alaska National Interest Lands Conservation Act, a subsistence hearing for the Woodpecker Project Area was held in Petersburg, Alaska, on October 4, 2000 at the Petersburg City Council Chambers. The date, time, and location of the subsistence hearing were publicized in the local media. An open house to describe the analysis process and to answer public questions was held in conjunction with the subsistence hearing. Public comments on the Draft EIS were also accepted at that time.

Analysis and Incorporation of Public Comments into the Final EIS: Public comments and subsistence comments were analyzed and incorporated into the Final EIS. For an analysis of public comment and the Forest Service response to public comment, see Appendix C of the Final EIS.

The Final EIS was filed with the Environmental Protection Agency and was made available for public review in September 2001.

Final EIS and 2001 Record of Decision: The Woodpecker Project Area Final EIS Notice of Availability was placed in the Federal Register on September 21, 2001, after the Record of Decision was signed. Alternative 6 was the Selected Alternative. A public notice, which started the 45-day appeal period, was placed in the *Juneau Empire*, the newspaper of record, on September 21, 2001. The decision was appealed on November 6, 2001, and on December 20, 2001, the decision was reversed.

Supplemental Information Report: A supplemental information report was prepared to document that the information used in the analysis leading to the 2001 Decision was correct. This report was mailed to the appellants and filed in the project planning record. In June 2002, a project update letter explaining the results of the supplemental information report was sent to everyone on the project mailing list. The letter included an invitation to participate in a public teleconference to discuss the project. The notes from this teleconference, which was held on June 18, 2002, are located in the project planning record.

2002 Record of Decision: The 2002 Record of Decision was signed on December 24, 2002. This decision included only the roaded portion of Alternative 6, as modified, due to the court's injunction that was in place at that time. No appeals were received.

2003 Record of Decision

Coordination with Other Agencies

From the time scoping was initiated, meetings and site visits with all interested federal and State of Alaska agencies have occurred. Issues were discussed and information was exchanged. Personnel from the Alaska Division of Governmental Coordination, Alaska Department of Fish and Game, Alaska Department of Environmental Conservation, and the U.S. Fish and Wildlife Service visited the project area during the environmental analysis.

Coordination meetings were held with the State of Alaska, including the Department of Fish and Game and the Department of Environmental Conservation. The Alaska Coastal Management Plan (ACMP) consistency review process was initiated upon publication of the Draft EIS through the offices of the Alaska Division of Governmental Coordination, now the Alaska Department of Natural Resources, Office of Program Management and Planning.

A Biological Assessment was prepared and sent to the National Marine Fisheries Service as part of the Section 7 consultation process under the Endangered Species Act. Consultation with the U.S. Fish and Wildlife Service concluded that no terrestrial threatened or endangered wildlife species are present in the project area.

Section 404 of the Clean Water Act (1977, as amended) requires a permit from the U.S. Army Corps of Engineers before filling or dredging in wetlands and tidelands. A permit has been obtained for the Woodpecker Cove Log Transfer Facility. Any 404 permits needed for roads or other uses will be obtained.

The Final EIS identifies the agencies that were informed of and/or involved in the planning process (see *List of Agencies, Organizations, and Individuals Sent Copies of this Statement* in Chapter 4 of the Final EIS).

How Significant Issues are Addressed

In making my decision, I considered four major issues identified during the planning process. In the following summary, I disclose how this decision addresses each of the significant issues. Tables ROD-1 and ROD-2 and Chapter 3 of the Final EIS provide additional information for the following discussion and provide a comparison of the alternatives.

Issue 1: Deer Hunting

This issue centers around the popularity of the Woodpecker Project Area for deer hunting by the residents of Mitkof Island, and the concern that any timber harvest on the island will affect deer populations. Mitkof Island has traditionally been used by residents of Petersburg for subsistence deer hunting. The Woodpecker Project Area is the most heavily used part of Mitkof Island for deer hunting, due to the

accessibility provided by the road system that connects to Petersburg, and the higher numbers of deer inhabiting the area. The number of deer is higher in the Woodpecker Project Area because of good forage and less snow accumulation found on the south-facing slopes near saltwater.

This decision includes Units 90, 90d, 122 and 122a, which contain high value deer winter habitat. The silvicultural prescription for these units will retain 75 percent of the basal area of the stands to help maintain old-growth characteristics. All proposed timber harvest units will contain residual trees, and many areas will be managed with uneven-aged management on an extended harvest cycle, which should maintain higher deer winter habitat values over time. The majority (96 percent) of the 3,370 acres of high value deer winter habitat (habitat suitability index greater than 0.9) within the project area will not be impacted by this action.

Issue 2: Recreation

This issue addresses concerns for outdoor recreation opportunities including scenic values offered in and around the Woodpecker Project Area and the effects timber harvest may have on these opportunities.

The Selected Alternative maintains existing recreation uses, both roaded and unroaded, within the Woodpecker Project Area. These uses include deer and moose hunting, berry-picking, sightseeing, camping, and freshwater fishing. The improvement and/or creation of eight dispersed camping/picnic sites and four parking turnouts were included in the 2002 Decision. These sites are accessible from existing roads. This decision includes the development of a loop road by the construction of approximately 0.8 miles of classified road between the end of existing Road 6282 and milepost 11 of Road 6245, the Woodpecker Road.

Recreation use may be temporarily displaced in some areas during timber harvest operations. Recreation use may increase with the improvement of dispersed recreation sites and turnouts, and the improvements to the Woodpecker Road (Road 6245) and the Snake Ridge Road (Roads 6246/40006) that were approved with the 2002 Record of Decision.

Unit location and design were carefully considered to minimize impacts to scenery and meet or exceed the visual quality objectives (VQOs) that were adopted by the Forest Plan. Forest Plan Visual Priority Travel Routes and Use Areas include Sumner Strait, Wrangell Narrows, South Blind Slough, and Crystal Mountain. The use of silvicultural systems that use partial harvest treatments (two-aged management and uneven-aged management) will result in textural changes, but these changes are not expected to be noticeable to the casual observer. The silvicultural prescriptions meet a higher level of VQOs than is specified for the Visual Priority Travel Routes and Use Areas, as described in the Forest Plan. Views from the existing ferry route were considered during unit selection and design, and during selection of harvest treatments.

2003 Record of Decision

In coming to this decision, I did consider the future South Mitkof Island ferry terminal that is proposed as part of the Alaska Marine Highway System. Although the new ferry terminal is still in the design stage, a site outside the Woodpecker Project Area has been identified as the preferred location, and any proposed activities in the Woodpecker Project Area will not be visible from that location. Studies have predicted that there will be little increased road use in the project area associated with this proposed ferry terminal. Traffic on Road 6245, as well as on other roads on Mitkof Island, is monitored as part of the District's road management plan.

Issue 3: Economics

This decision will provide an estimated 10.9 million board feet (22,296 CCF) of timber that will contribute to the Forest Service's efforts to meet market demand in a manner consistent with the Tongass Land and Resource Management Plan and the standards and guidelines for all resources. This volume was calculated using stand exam information combined with Forest Plan volume strata information. Timber from this project is needed as a component of the timber sale schedule to provide timber to industry in an even flow over the ten-year planning cycle. The harvest economic analysis for the units in this decision using the Transaction Evidence Appraisal (TEA) method used for the analysis displayed in the Final EIS resulted in a stumpage value of -\$26.19 per hundred cubic feet (-\$26.19/CCF or -\$53.45/MBF) during high markets and -\$42.60/CCF (-\$86.94/MBF) during low markets. The 2nd quarter 1999 data used for TEA was the same as that used for the analysis in the Woodpecker Project Area Final EIS.

Additional analysis based on the NEPA Economic Analysis Tool (NEAT) program which was developed after the analysis was completed for the Final EIS was conducted for the alternatives prior to the 2002 ROD. The ranking of alternatives in the NEAT analysis was similar to the original analysis, although the values per CCF were lower. This was expected due to lower timber values in recent years. The NEAT analysis using the data from 1st quarter 2003 appraises the timber volume for the 2003 decision at -\$38.42/CCF (-\$78.41/MBF). The documentation for both economic analyses is located in the project planning record.

These are lower values than the values for the analysis done for Alternative 6 since the timber that was the most economical to log adjacent to roads was included in the 2002 Record of Decision. Options to increase the value of the timber may be used at the time of offer. These options may include (1) using construction of a lower standard of road, (2) using a different utilization standard to leave smaller timber in the woods, or (3) deferring less economic units. The appraised value of the timber at the time of the sale will depend on the markets at that time and which units are chosen for that sale.

Stumpage values actually received on timber sales are highly variable and are subject to market conditions at the time the sale is offered. The risk of changing market

conditions is reflected in the bid for timber, which is calculated by the purchasers who understand and track that risk. The values will also differ depending on the amount of volume and unit locations of that particular sale. It is expected that some of the sales offered will be more economical and will generate more revenue than others due to the composition of the stand in terms of tree species and value of trees, haul length, and topography.

The timber harvest from the Woodpecker Project Area is scheduled to be sold in multiple sales. Some sales may be less financially appealing to prospective bidders during low markets due to the necessity of road construction, distance from the mill, inclusion of helicopter logging, or the mix of timber species and size. However, units and logging systems will be configured to create the most economical sales possible.

The permitted outfitters and guides operating within the project area use the Woodpecker Cove Log Transfer Facility and the road system. Effects to this use will be minor due to the low level of use, based on information from the permits issued in the past few years. Outfitter-guide use is not expected to increase much beyond the few permits currently issued.

Issue 4: Crystal Inventoried Roadless Area

About two-thirds of the Crystal Inventoried Roadless Area (#224) is within the Woodpecker Project Area. During the analysis for the revision of the Forest Plan, Inventoried Roadless Areas were reevaluated for their value as undeveloped areas or for potential inclusion in the National Wilderness Preservation System (Forest Plan Final EIS, Appendix C). The portion of the Crystal Inventoried Roadless Area that is within the Woodpecker Project Area has been allocated to development land use designations, which allow timber harvest and road construction.

The analysis for the Crystal Inventoried Roadless Area focused on the effects on the values of the unroaded characteristics on the ground, regardless of whether the area is specifically labeled as an inventoried roadless area. The IDT for this project updated the Forest Plan inventory to reflect on-the-ground conditions and changes in land ownership. Documentation of the inventory used and the analysis are found in the project planning record. During the analysis for the Woodpecker Project Area, several alternatives that would not affect the Crystal Inventoried Roadless Area were considered along with alternatives that proposed timber harvest and road construction within the Inventoried Roadless Area.

Due to the mountainous terrain, habitat types, and current wildlife and human uses, the portion of the roadless area containing its most important roadless area values is located outside the Woodpecker Project Area to the north, around Crystal Mountain and Blind Slough. This area is designated for non-development by the Forest Plan. Therefore, the most important values of the Crystal Inventoried Roadless Area will be minimally affected by this project and the remaining roadless acreage (greater than 5,000 acres) will continue to make this area eligible for inclusion in the National Wilderness Preservation System.

2003 Record of Decision

This decision includes timber harvest on 370 acres within the roadless area. The silvicultural prescriptions retain from 50 to 75 percent of the stand structure in these units. There are two miles of classified road construction planned and 0.8 miles of temporary road construction within the roadless area. Only 0.8 miles of classified road will remain open for public use and the remaining classified roads will be closed and put into storage. The temporary roads will be decommissioned after timber harvest.

An updated inventory of the Inventoried Roadless Areas was done for the Forest Plan SEIS (2003). Based on the criteria used in this inventory, which more closely adhered to the 600-foot influence zone from previously harvested units, the Crystal Inventoried Roadless Area is 19,069 acres in size. The description and reevaluation of the Crystal Inventoried Roadless Area for suitability for designation as Wilderness is in the Forest Plan SEIS (Appendix C1-239 through C1-249). The biological and social values of the area remain the same, since the general shape and location of the roadless area do not change regardless of the inventory used to define its boundaries. Using the SEIS criteria, the number of planned timber harvest acres within the roadless area increases by ten acres and the area within the 600-foot influence zone increases from 770 to 996 acres. The remaining unaffected size of the roadless area is 18,585 acres.

As previously explained, the Roadless Area Conservation Rule (Roadless Rule, 36 CFR 294.10, January 12, 2001) generally prohibits timber harvesting and road building in roadless areas with a period of transition for the Tongass. This transition period makes an exception for projects where a notice of availability for a draft environmental impact statement was published prior to January 12, 2001. Since the notice of availability for the Woodpecker project was published on August 18, 2000, this project is exempted from the prohibitions in the Roadless Rule. The Woodpecker project is consistent with the Forest Plan and the SEIS. Further details on the decisions and litigation that have occurred since the Draft EIS was issued are available in the project planning record.

Alternatives Considered in Detail

The Woodpecker Project Area Draft EIS considered five alternatives in detail. Alternative 2 was identified as the Preferred Alternative at that time. After reviewing the public comments, the Preferred Alternative identified in the Draft EIS (Alternative 2) was modified to create Alternative 6. These changes to the preferred alternative were described in the Final EIS (August 2001).

Six alternatives were considered in detail in the Final EIS. Alternative 6 was chosen as the Selected Alternative. Each action alternative considered during the analysis process is consistent with the Tongass Land and Resource Management Plan. Refer to Chapter 2 of the Woodpecker Project Area Final EIS for a complete description of these alternatives. The alternatives developed in the Final EIS are:

Alternative 1 - This No-action Alternative represented the existing conditions in the Woodpecker Project Area, and served as the baseline against which the effects of the other alternatives were measured. This alternative proposed no timber harvest, road construction, or other activities within the Woodpecker Project Area. There would be no new resource outputs associated with this alternative. There would be no changes to scenery, recreation, subsistence, wildlife, or fisheries resources.

This alternative was not selected since environmental analysis showed that the desirable outputs of the purpose and need could be achieved with reasonable effects to the ecological and human environments. These effects are described in Chapter 3 of the Final EIS.

Alternative 2 – This alternative was the Proposed Action presented during public scoping and identified as the Preferred Alternative for the Draft EIS. The theme of this alternative responded to the comments in favor of ground-based logging systems, small timber sale opportunities, and a new loop road connection.

In Alternative 2, an estimated 1,140 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume is estimated to be 12 million board feet (about 24,490 CCF), to be sold in multiple sales, including some sales of less than one million board feet. Approximately 4.8 miles of new classified road would be built to access the timber, of which about 1.8 miles would remain open after harvest. Approximately 6.1 miles of temporary road would also be built for timber access. All of the temporary roads would be decommissioned and allowed to return to a more natural state after harvest. About ten miles of existing classified roads that would be needed for future management would be closed and put into storage to reduce resource damage. Improvement of fish passage through five existing stream crossings along Road 6245 would occur.

This alternative would also improve dispersed recreation opportunities, parking areas for hunting and recreation access, and watershed conditions through revegetation. This alternative would connect Roads 6282 and 6245 to form a loop road.

Alternative 2 was not chosen in order to mitigate some of the effects to the deer winter habitat and landscape connectivity in the southeastern part of the project area (Watershed 2) by not harvesting units 128 and 129, and to mitigate possible scenery concerns for Unit 125 as viewed from Sumner Strait, a Visual Priority Travel Route.

Alternative 3 – This alternative was focused on providing only small timber sale opportunities and on the use of the existing road system with no construction of new classified roads designed for long-term use. It was designed to have the least impact on resources other than timber management within the project area.

An estimated 500 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume provided is estimated to be

2003 Record of Decision

6 million board feet (about 12,245 CCF) to be sold in multiple sales. Existing roads and approximately four miles of new temporary road would be used to access the timber. All of the temporary roads would be decommissioned and allowed to return to a more natural state as soon as practicable after harvest is complete. About ten miles of existing classified roads needed for future management would be closed and put into storage to reduce resource damage. Improvement of fish passage through five existing stream crossings along Road 6245 would occur. No other resource activities were incorporated with this alternative.

Several commenters identified this alternative as the one that should be chosen rather than one that harvests more timber. However, the Selected Alternative provides for a more equitable mix of resource protection and resource use that is consistent with the Forest Plan land use allocations.

Alternative 4 – This alternative was designed to respond to the request for helicopter logging while still providing small sale opportunities that could be harvested using ground-based systems.

This alternative would harvest approximately 16.8 million board feet (about 32,286 CCF) of timber from approximately 1,850 acres. About 1,390 acres would be harvested by helicopter yarding and approximately 460 acres would be harvested by cable or shovel yarding. No new classified road would be constructed, but 3.1 miles of temporary road would be built within the project area. All of the temporary roads would be decommissioned and allowed to return to a more natural state after harvest. About ten miles of existing classified roads needed for future management would be closed and put into storage to reduce resource damage. Improvement of fish passage through five existing stream crossings along Road 6245 would occur.

This alternative, as with Alternative 2, would also improve dispersed recreation opportunities, parking areas for hunting and recreation access, and watershed conditions through revegetation.

The primary reason that Alternative 4 was not chosen was because of its emphasis on helicopter logging. Although helicopter logging can be economically viable, many of the proposed helicopter units could be roaded, which is preferable from an economic viewpoint and for long-term timber management of the area.

Alternative 5 – The theme of this alternative was to provide more timber volume to seek to meet market demand by fully complying with, but not exceeding, Forest Plan standards and guidelines.

This alternative would harvest approximately 26.8 million board feet (about 54,694 CCF) of timber using ground-based and helicopter yarding from approximately 1,730 acres. Most of the acres would have less than 50 percent of the trees remaining after harvest, resulting in even-aged or two-aged stands. This alternative would require construction of about 3.5 miles of classified roads and 4.1 miles of temporary road.

About one mile of new classified road would remain open after harvest. All of the temporary roads would be decommissioned and allowed to return to a more natural state after harvest. About ten miles of existing classified roads needed for future management would be closed and put into storage to reduce resource damage. Improvement of fish passage through five existing stream crossings along Road 6245 would occur.

This alternative would improve dispersed recreation opportunities to a slightly greater degree than Alternatives 2 and 4. Parking areas for hunting and recreation access would be improved, and watershed conditions would be improved through revegetation.

Alternative 5 was not chosen since, although it would meet the standards of the Forest Plan, more protection for various resources was desirable because of the road connection to the city of Petersburg, and due to the human uses of the area and the surrounding waters.

Alternative 6 – The effects of the activities in Alternative 6 as displayed in the Final EIS are the same as the combination of the effects of the 2002 Decision and this decision.

An estimated 1,300 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume provided was estimated to be 16 million board feet (32,653 CCF) to be sold in multiple sales, including sales less than one million board feet.

Alternative 6 includes both new road construction and helicopter logging from existing roads. Approximately 4.8 miles of new classified road would be built to access the timber. About 1.8 miles of this new classified road would remain open, and three miles would be placed in storage after harvest is completed. Temporary road segments, which total 3.8 miles, would be built for timber access. All of the temporary roads would be decommissioned after harvest. About ten miles of existing road would be closed to motorized vehicles and placed in storage. A short 300-foot section of unclassified road that junctions with Road 40004 would be decommissioned and allowed to return to a more natural state with respect to vegetation and natural drainage patterns. Logs would be transported to an existing log transfer site or processing yard.

Several recreation sites were proposed for development. Improved or new road turnouts would be developed to provide additional safe parking areas. A segment of road would be constructed to create a loop by connecting the Woodpecker Road with another existing road to provide a new recreation opportunity. The Woodpecker Road, the Snake Ridge Road and the access to the Snake Ridge Road would be improved for standard passenger vehicle use.

2003 Record of Decision

Comparison of Alternatives

The following two tables display the proposed activities by alternative and the effects on the significant issues and other resources by alternative. For a complete discussion, refer to Chapter 3 of the Woodpecker Project Area Final EIS (August 2001).

Table ROD-1. Comparison of Alternatives by Proposed Activity

Selected Alternative								
Proposed Activity	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6 ¹	2002 Decision ²	2003 Decision
Acres of timber harvest by harvest treatment								
75% retention	0	570	140	740	200	380	80	300
50-66% retention	0	350	200	990	530	680	180	500
20-30% retention	0	220	160	120	940	240	140	100
0% retention	0	0	0	0	60	0	0	0
Acres of timber harvest by logging systems								
Cable	0	990	350	310	640	750	270	480
Shovel	0	150	150	150	150	150	130	20
Helicopter	0	0	0	1,390	940	400	0	400
Road construction								
Miles of new classified roads	0	4.8	0	0	3.5	4.8	0	4.8
Miles of new classified roads left open	0	1.8	0	0	1.0	1.8	0	1.8
Miles of temporary roads (closed after harvest)	0	6.1	3.9	3.1	4.1	3.8	2.5	1.3
Number of recreation projects								
Picnic/Campsites	0	7	0	7	8	8	8	0
Turnouts	0	4	0	4	4	4	4	0

¹ Alternative 6 was the Selected Alternative for this project in the 2001 Record of Decision. This column shows the combined activities from the 2002 Decision and the 2003 Decision.

² This column shows the activities in the 2002 Record of Decision (Alternative 6, as modified). This included activities in the roaded portion only.

2003 Record of Decision

Table ROD-2. Comparison of Alternatives by Effects

Units of Measure	Selected Alternative				
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Issue 1 – Deer Hunting					
Change in deer carrying capacity year 2003 ³	0%	-1.5%	-9%	-1.8%	-2.4%
Change in deer carrying capacity year 2043 ⁴	-9.6%	-11.3%	-10.5%	-11.2%	-12.7%
Effect on historical levels of subsistence deer harvest?	yes	yes	yes	yes	yes
Effect on current levels of deer harvest?	no	no	no	no	no
Issue 2 – Recreation					
Acres changed from semi-primitive to roaded settings ⁵	0	1270	260	2280	2230
% of area changed from semi-primitive to roaded settings	0	4%	<1%	8%	7%
Issue 3 – Economics					
Amount of volume (mbf)	0	12,300	5,700	16,800	26,800
Amount of volume (ccf)	0	25,200	11,600	34,200	54,200
Appraised value (\$/ccf) (High Market values)	0	\$15.38	\$35.24	\$5.63	\$15.31
Appraised value (\$/ccf) (Low Market values)	0	-\$6.12	\$17.37	-\$20.24	-\$6.16
Issue 4 – Crystal Inventoried Roadless Area (IRA)⁸					
Acres within the IRA affected by timber harvest	0	310 acres	0	830 acres	800 acres
Miles of new classified road within the IRA	0	2.0 miles	0	0	1.4 miles
Acres affected by timber harvest, including areas within 600 ft of harvest units	0	850 acres	140 acres	1,910 acres	1,860 acres
Remaining size of IRA excluding acres within 600 ft of harvest units	18,320 acres	17,470 acres	18,180 acres	16,410 acres	16,460 acres
Other Environmental Considerations					
Biodiversity					
Acres of old-growth habitat maintained	14,250	13,820	14,020	13,920	13,170
Effects on TES Species	None	None	None	None	None
Other Wildlife					
Percent change in marten carrying capacity by year 2003 ³	0%	-1.8%	-1.1%	-2.4%	-3.3%
Percent change in marten carrying capacity by year 2043 ⁴	-1.7%	-3.2%	-2.5%	-2.9%	-4.7%
Water Quality					
Number of new Class I stream crossings	0	0	0	0	0
Number of new Class II stream crossings	0	2	1	1	2
Number of new Class III stream crossings	0	13	1	1	11
Number of new Class IV stream crossings	0	2	0	0	2
Other Environmental Considerations					
Biodiversity					
Acres of old-growth habitat maintained	14,250	13,820	14,020	13,920	13,170
Effects on TES Species	None	None	None	None	None
Other Wildlife					
Percent change in marten carrying capacity by year 2003 ³	0%	-1.8%	-1.1%	-2.4%	-3.3%
Percent change in marten carrying capacity by year 2043 ⁴	-1.7%	-3.2%	-2.5%	-2.9%	-4.7%
Water Quality					
Number of new Class I stream crossings	0	0	0	0	0
Number of new Class II stream crossings	0	2	1	1	2
Number of new Class III stream crossings	0	13	1	1	11
Number of new Class IV stream crossings	0	2	0	0	2

Table ROD-2. Comparison of Alternatives by Effects (cont'd)

Table ROD-2. Comparison of Alternatives by Effects (cont'd)						Selected Alternative		
Units of Measure	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	(Alt. 6) ¹	2003 Decision ²	2003 Decision
Wetlands								
Miles of new classified road on wetlands	0	1.1	0	0	1.1	1.1	0	1.1
Effects on Subsistence other than deer	None	None	None	None	None	None	None	None
Effects on Heritage Resources	None	None	None	None	None	None	None	None
Effects on Land Status	None	None	None	None	None	None	None	None
Effects on Karst	None	None	None	None	None	None	None	None
Transportation								
Miles of new classified roads	0	4.8	0	0	3.5	4.8	0	4.8
Miles of new classified roads left open	0	1.8	0	0	1.0	1.8	0	1.8
Miles of temporary roads (decommissioned after harvest)	0	6.1	3.9	3.1	4.1	3.8	2.5	1.3
Road density for Mitkof Island (mi/mi ²) ¹¹	0.68	0.69	0.68	0.68	0.68	0.69	0.68	0.69
Effects on Wild, Scenic and Recreational Rivers	None	None	None	None	None	None	None	None

¹ Alternative 6 was the Selected Alternative for this project in the 2001 Record of Decision.

² This column shows the activities in the 2002 Record of Decision (Alternative 6, as modified). This included only the activities in the roaded portion of the project area.

³ For the purposes of alternative comparison and analysis for the deer and marten models only for the environmental impact statement completed in 2001, it was assumed that all harvest would occur by 2003. This has been delayed due to legislation and litigation.

⁴ Approximately 40 years after harvest at year 2043, the canopies of the existing second-growth stands will close, reducing forage. This scenario does not account for the effects of any future thinning, which may increase or maintain forage.

⁵ For total acreages in each Recreation Opportunity Spectrum class for each alternative refer to Table 3-4 in Chapter 3 of the Final EIS.

⁶ The total of the cubic volumes from the 2002 ROD and the 2003 ROD do not equal the cubic volume of Alternative 6. The volume for the units in Alternative 6 (and all alternatives) was calculated prior to the economic analysis using thousand board feet (mbf). The volumes for the 2002 Decision and the 2003 Decision were calculated by the TEA analysis process. All volume figures are estimates. A volume for each sale offered from this project will be determined by a statistically accurate cruise prior to appraisal.

⁷ These values are not cumulative since they represent the value of the timber for the units in each decision. Alternative 6 shows the value of the 2002 and 2003 Decisions combined. Units from both decisions may be combined when offered for sale.

⁸ 1996 Roadless Area Inventory, adjusted for project analysis (see Final EIS, Chapter 3, page 3-71).

⁹ Although there are approximately 70 acres within the Crystal Inventoried Roadless Area that are within 600 feet of a proposed timber harvest unit, all of the proposed timber harvest for the 2002 ROD will occur outside any roadless area and within 1200 feet of an existing road.

¹⁰ Includes the effects of the 2002 decision.

¹¹ Road density is determined after the roads constructed for this project are either put into storage or decommissioned.

Environmentally Preferred Alternative

Based on a comparison of the alternatives and the discussion contained within Chapter 3 of the Final EIS, Alternative 1, the No-Action Alternative, would cause the least environmental disturbance and is therefore the environmentally preferred alternative of all the alternatives considered in detail.

Alternatives Not Considered in Detail

In addition to the alternatives described above, several other alternatives were considered during the analysis but eliminated from detailed study. These alternatives were discussed during the development of the alternatives. Some of them were suggested by comments received through public scoping. Some of the aspects of the ideas were modified and used in conjunction with the alternatives considered in detail. Other alternatives would not meet Forest Plan direction for this project. A summary of these, and the reasons they were not analyzed in detail, can be found in Chapter 2 of the Final EIS. Further information is available in the project planning record.

Planning Record

The planning record for this project includes the Draft EIS, Final EIS, 2001 Record of Decision, the appeal and appeal decision letter, the Supplemental Information Report, the 2002 Record of Decision, material incorporated by reference, and all materials produced during the environmental analysis of this project. The planning record is available for review at the Petersburg Ranger District.

Mitigation

Mitigation measures are prescribed to avoid, reduce, minimize or eliminate the adverse effects of proposed actions. These measures were applied in the development of the project alternatives, including the Selected Alternative, and in the design of the harvest units and road corridors. The "Mitigation Measures" section of Chapter 2 and Appendix B of the Final EIS discuss mitigation measures for all alternatives.

Mitigation measures applicable to the Selected Alternative include measures contained in the standards and guidelines of the Forest Plan, and applicable Forest Service manuals and handbooks. The Appendix of this ROD describes site-specific mitigation measures for the Selected Alternative. These measures are adopted as part of this decision and will be implemented.

Monitoring

A monitoring program is the process by which the Forest Service can evaluate whether the resource management objectives of the final environmental documents have been implemented as specified and whether the steps identified for mitigating the environmental effects were effective. Project-level monitoring is specified in Chapter 2 of the Final EIS. These monitoring items are part of this decision and will be implemented.

Each monitoring item describes the objective of the monitoring, what will be done, how it will be done, and the approximate cost of the monitoring. Monitoring activities may reveal results that deviate from planned effects, in which case corrective actions are prescribed. The Petersburg District Ranger is responsible for ensuring that project implementation, mitigation, monitoring, and enforcement are accomplished as specified in the Final EIS.

Findings Required By Law

National Forest Management Act

The National Forest Management Act (NFMA) requires specific determinations in this Record of Decision: consistency with the existing Forest Plan, a determination of clearcutting as the optimal method of harvesting, if used, and specific authorizations to create openings over 100 acres in size. Specific information and rationale used to develop unit prescriptions are summarized in this Record of Decision and are included in the unit card narratives in the Appendix. More information is available in Chapter 3 of the Final EIS, and in the project planning record.

- **Tongass Land and Resource Management Plan** - This decision is consistent with the Tongass Land and Resource Management Plan. I have reviewed the management direction, standards and guidelines, and the schedule of activities for the project area, and find the Selected Alternative to be consistent with these elements. The activities authorized in this decision are consistent with the standards and guidelines and management prescriptions of the Forest Plan.
- **Clearcutting as the Optimal Method of Harvesting** – In order to comply with Forest Plan standards and guidelines and to mitigate effects on wildlife and scenery, no units in the 2003 Selected Alternative are proposed for traditional clearcutting where all trees would be removed.
- **Harvest Openings Over 100 Acres in Size** - There are no harvest openings over 100 acres proposed for this project.

Tongass Timber Reform Act (TTRA)

Harvest units were designed and located to maintain a minimum 100-foot buffer zone for all Class I streams and Class II streams that flow directly into Class I streams as required in Section 103 of the TTRA. The actual widths of these buffer strips will often be greater

2003 Record of Decision

than the 100-foot minimum. The design and implementation direction for the Selected Alternative incorporates Best Management Practices (BMPs) for the protection of all streams.

Endangered Species Act

Actions authorized in the Selected Alternative are not anticipated to have a direct, indirect, or cumulative effect on any threatened or endangered species in the Woodpecker Project Area. The National Marine Fisheries Service has concurred that the actions described within the proposed project are not likely to adversely affect threatened and endangered species. A complete biological assessment is included in the planning record for this project. Consultation was done with the U.S. Fish and Wildlife Service. No terrestrial threatened or endangered species are known to occur in the Woodpecker Project Area. I have determined that this action will not have any adverse impacts on any threatened or endangered species.

Bald Eagle Protection Act

The Selected Alternative is not anticipated to have a significant direct, indirect, or cumulative effect on any bald eagle habitat. Management activities are restricted within 330 feet of an eagle nest site by a Memorandum of Understanding (MOU) between the Forest Service and the U.S. Fish and Wildlife Service. No proposed activities are within 330 feet of a known bald eagle nest. If any nests are discovered that would be affected by any activity, the MOU and Forest Plan guidelines will be followed.

Clean Water Act

The design for the harvest units and roads for the Selected Alternative were guided by standards, guidelines and direction contained in the Forest Plan and applicable Forest Service manuals and handbooks. The Clean Water Act of 1972 (as amended in 1977 and 1987) was intended to protect and improve the quality of water resources and maintain their beneficial uses. Section 313 of the Clean Water Act and Executive Order 12088 of 1987 address Federal agency compliance and consistency with water pollution control mandates. Agencies must be consistent with requirements that apply to “any governmental entity” or private person.

In 1997, the State of Alaska approved the BMPs in the Forest Service’s Soil and Water Conservation Handbook (FSH 2509.22, October 1996) as consistent with the Alaska Forest Resources and Practices Regulations. The site-specific application of BMPs, with a monitoring and feedback mechanism, is the approved strategy for controlling nonpoint source pollution as defined by Alaska’s Nonpoint Source Pollution Control Strategy (October 2000). The Unit Cards and Road Cards in the Appendix contain details on specific practices prescribed to prevent or reduce non-point sediment sources.

Essential Fish Habitat

The potential effects of the project on Essential Fish Habitat are discussed in Chapter 3 of the Draft EIS. A determination that the project was unlikely to affect Essential Fish Habitat was made and an Essential Fish Habitat Assessment was presented. In the Final

EIS, some of this information was updated to include more complete descriptions of the Essential Fish Habitats, the proposed activities, and the mitigation measures incorporated into the project that will minimize adverse effects on these habitats. These measures are:

1. Retention of green standing trees will occur in all units. This will lessen the impact on soil resources and minimize sedimentation in Class I streams.
2. No roads will be constructed across Class I streams. This will eliminate the need for any in-stream work that would directly affect anadromous fish habitat.
3. All harvest units adjacent to Class I streams employ no-harvest buffers at least 100 feet wide and generally wider according to Forest Plan standards and guidelines. This will protect anadromous fish streams from bank erosion and stream temperature increases.
4. All harvest units adjacent to Class II and Class III streams will employ no-harvest buffers and windfirm buffers according to Forest Plan standards and guidelines. This will minimize the amount of sediment that flows downstream to anadromous fish streams.
5. Five culverts not meeting the current fish passage standards along Road 6245 were identified during environmental analysis and have been corrected.
6. No new log transfer facilities (LTFs) will be built. Logs will be transported to existing permitted LTFs or hauled by road to Petersburg. All log transfer facility use will be monitored to ensure that bark accumulation remains within thresholds specified by the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) permit.
7. Best Management Practices described on the unit and road cards provide for aquatic habitat and water quality protection for all freshwater streams and marine waters affected by the project.

The Draft EIS and the Final EIS were sent to the National Marine Fisheries Service and they were contacted by telephone. No conservation recommendations or comments on the Essential Fish Habitat Assessment were received, and the consultation concluded.

National Historic Preservation Act

Heritage resource surveys of various intensities were conducted in the project area, following protocols approved by the State Historic Preservation Officer. The Section 106 review for all proposed timber harvest units and roads has been completed. The State Historic Preservation Officer has been consulted, and the project complies with the provisions of 36 CFR Part 800. No known heritage resources are in the area of potential effects. Forest Service timber sale contracts contain enforceable measures for protecting any undiscovered heritage resource that might be encountered during sale operations. I have determined, consistent with Forest Service direction on heritage resources, that no sites eligible for listing on the National Register of Historic places would be affected.

Federal Cave Resource Protection Act of 1988

No cave resources have been documented within the project area and no caves were discovered during field work done for this analysis. The Selected Alternative will not

2003 Record of Decision

have a direct, indirect, or cumulative effect on any significant cave or karst resources in the Woodpecker Project Area.

ANILCA Section 810, Subsistence Evaluation and Findings

A subsistence evaluation was conducted for the alternatives considered in detail, in accordance with ANILCA Section 810. An open house followed by an ANILCA 810 hearing was conducted in Petersburg, Alaska, during the comment period for the Woodpecker Project Area Draft EIS.

The review of the subsistence hearing testimony, comments from the public, and the analysis conducted for the Final EIS indicate that there is no significant possibility of a significant restriction on subsistence uses of wildlife (other than Sitka black-tailed deer), salmon, other finfish, shellfish, marine mammals, plant foods such as berries, and personal use timber resources as a result of this project. (For more information, see the Subsistence section of Chapter 3 of the Final EIS.) Analysis does indicate that there may be a significant possibility of a significant restriction of the historical subsistence use of deer for all of the alternatives including the no-action alternative. However, implementation of the Selected Alternative by itself does not present a significant possibility of a significant restriction to the current level of subsistence use of deer. The effects solely from the decisions on this project on the subsistence use of deer are minimal, with a reduction of less than two percent in deer habitat capability. Rather, there may be a significant possibility of a significant restriction when this decision together with other past, present, and reasonably foreseeable actions, are considered in a cumulative manner. This possibility exists regardless of which alternative is implemented, including the No-Action Alternative presented in the Final EIS. (For more information, see the Issue 1, Deer Hunting section in Chapter 3 of the Final EIS.) This restriction, if it occurs, would be a result of (1) a cumulative decrease in habitat capability when existing second-growth forest stands mature and shade out forage that could decrease the abundance or distribution of deer, (2) a very severe winter, which does occur periodically, causing high deer mortality as happened in the late 1960's, (3) an increase of predator populations, especially wolves, due to less aggressive predator harvests, and (4) anticipated human population growth, with its associated increase in subsistence hunter demand when compared to the habitat capability to produce deer.

Subsistence Determinations

Section 810 (a)(3) of ANILCA requires that when a use, occupancy, or disposition of public lands may result in a significant possibility of a significant restriction, a determination must be made whether (1) such a restriction is necessary, consistent with sound management principles for the utilization of public lands, (2) the proposed activity involves the minimum amount of public lands necessary to accomplish the purposes of the use, and (3) reasonable steps will be taken to minimize adverse impacts on subsistence uses and resources resulting from the actions.

Necessary, Consistent with Sound Management of Public Land – The Selected Alternative has been examined to determine whether the associated potential restriction to subsistence use is necessary, consistent with the sound management of public lands. In

this regard, the laws and direction that have been considered include: (1) the National Forest Management Act of 1976 and its implementing regulations, (2) the Alaska National Interest Lands Conservation Act (ANILCA) of 1980, (3) the Tongass Land and Resource Management Plan (1997, as amended), (4) the Tongass Timber Reform Act (TTRA) of 1990, (5) the Alaska State Forest Practices Act, (6) the Alaska Coastal Management Program, (7) the Multiple-Use Sustained Yield Act (1960), and (8) USDA Forest Service Subsistence Management and Use Handbook (FSH 2609.25).

Management activities on National Forest System lands must provide for the multiple use and sustained yield of renewable forest resources in accordance with the Multiple-Use Sustained Yield Act of 1960. Multiple use is defined as "the management of all the various renewable surface resources of the National Forest System so that they are utilized in the combination that will best meet the needs of the American people" (36 CFR 219.3). The alternatives presented in the Final EIS represent different ways of managing the resources of the Woodpecker Project Area in combinations that are intended to meet these needs. Each provides a different mix of resource uses and opportunities, and each has some potential to affect subsistence uses. Given the framework and emphasis of the Selected Alternative, the possibility of a restriction is necessary, consistent with sound management of public land.

ANILCA Title VIII places an emphasis on the maintenance of subsistence resources and lifestyles. However, the Act also provides for adequate opportunity for satisfaction of the economic and social needs of the State of Alaska and its people and recognizes that public lands are necessary and appropriate for more intensive uses. The Act also required the Forest Service to make available 4.5 billion board feet per decade from the Tongass National Forest. The TTRA removed the 4.5 billion board foot requirement, but directs the Forest Service to seek to meet market demand for timber to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, and subject to applicable law.

As described in Appendix A of the Final EIS, this project is necessary as a component of the timber management program designed to implement the Forest Plan and to meet TTRA direction. There is currently a market demand for timber, a limited timber supply from other sources, and an under-utilized mill capacity in the region. The volume from the Selected Alternative is a component of the 10-year timber sale schedule which attempts to provide timber to industry in an even flow over the planning cycle. The timber volume for this project was also designed to be sold in multiple small sales over a period of several years in order to offer sales for timber operators with small businesses in the area. The Selected Alternative can help meet these Forest Plan and TTRA objectives, while also providing reasonable protection measures for forest resources, especially for subsistence. It is consistent with the Forest Plan, laws, regulations, policies, public needs, and the capabilities of the land.

Based on a review of the subsistence hearing testimony and the analysis conducted in the Final EIS, it is apparent that all of the alternatives may involve some potential impact to subsistence deer use in the future. Due to the cumulative effects of past, present and

2003 Record of Decision

reasonably foreseeable actions, there is no alternative, including the no-action alternative, that would meet Forest Plan and TTRA objectives and yet completely avoid a significant possibility of a subsistence restriction somewhere in the Tongass National Forest. From the analysis of the information presented in the Final EIS and this ROD, and the guidance provided by the documents and laws listed above, I have determined that the actions involved in the implementation of the Selected Alternative are necessary, consistent with sound management of public lands and strike the best balance between meeting the needs of the public and protecting the forest resources.

Amount of Land Necessary to Accomplish the Purpose of the Proposed Action – The amount of public land involved to implement the Selected Alternative (considering sound multiple-use management of public lands) is the minimum necessary to accomplish the purpose of the project. Most of the Tongass National Forest is used by one or more rural communities for subsistence deer hunting purposes. It is not possible to reduce timber harvest in one area and concentrate it in another locale without impacting one or more rural communities' important subsistence use areas. In addition, harvestable populations of subsistence wildlife species could not be maintained in a natural distribution across the forest if harvest were concentrated in specific areas. A well-distributed population of species is required by the National Forest Management Act and is one of the objectives of the Forest Plan.

The Forest Plan allocated many of the important subsistence use areas to land use designations that do not allow timber harvest. Other areas that are important to subsistence use were protected through standards and guidelines, such as the 1,000-foot beach and estuary buffers and the streamside Riparian Management Areas that do not allow timber harvest. Of the 28,440 acres of National Forest System lands within the Woodpecker Project Area, the Forest Plan allocated 17 percent of the area to the non-development land use designation of Old-growth Habitat, which does not allow timber harvest, and 83 percent to development land use designations such as Timber Production, Modified Landscape, and Scenic Viewshed. These designations provide for resource use and development for commodity resources such as timber.

The minimum amount of land and road construction was used to meet the purpose and need for this project while resolving resource concerns in a practical and efficient manner. This decision allows timber harvest from only three percent of the total Woodpecker Project Area. When combined with the 2002 Decision, timber harvest would occur on 4.6 percent of the project area. All of these acres will have some tree retention after harvest.

Two-aged and uneven-aged silvicultural systems are prescribed for all units. Because these methods remove less timber than a traditional clearcut unit of the same size, the effects for many resources will be less than the effects from clearcutting. Resources are protected to the maximum extent practicable and the Selected Alternative meets or exceeds the Forest Plan standards and guidelines.

Past harvest practices of clearcutting in the Woodpecker Project Area will also affect the future deer habitat capability. By the year 2043, a decrease in deer habitat capability for

the no-action alternative is predicted to be 9.6 percent when compared to conditions before large-scale timber harvesting occurred in the project area. This decline will occur when the existing second-growth stands reach complete canopy closure, which will result in a reduction of forage for deer. The 2003 decision will result in an additional decrease of 1.4 percent by year 2043 for a cumulative decrease of 11.2 percent when considering the effects of the activities proposed in the 2002 decision. The use of partial harvest, as designed for the Woodpecker Project Area, will not create the large openings that past clearcutting did, and future changes in habitat capability will not be as great as with the timber harvest that has already occurred.

The greatest risk to meeting subsistence demand in the future is primarily related to the anticipated human population growth and its associated increase in subsistence hunter demand when compared to the habitat capability to produce deer. This anticipated population growth will happen regardless of this proposed project.

Management activities cannot completely avoid all subsistence areas, which are broadly distributed across the Forest. Other areas that could be harvested may be limited by additional resource concerns such as soil and water protection, high-value wildlife habitat, economics, scenic quality, or unfeasible unit and road design. The impact of viable timber harvest projects usually includes the alteration of old-growth habitat which reduces habitat capability for old-growth associated species.

The Woodpecker Project involves the minimum amount of public land necessary and strikes a balance between meeting the needs of the public and protecting forest resources. Choosing any alternative, including the no-action alternative, or locating harvest in another location on Mitkof Island would not avoid or substantially lessen the risk to subsistence use in the future.

Reasonable Steps to minimize Adverse Impacts Upon Subsistence uses and Resources – The Forest Plan took considerable steps to minimize adverse impacts to subsistence uses and resources. Forest Plan standards and guidelines protect important deer winter habitat. Other reasonable steps taken to minimize adverse impacts to subsistence resources include: the overall Forest Plan land use designation strategy, the old-growth habitat reserve strategy, travel and access management planning, Forest Plan standards and guidelines for stream, beach and estuary buffers, and the use of silvicultural systems that maintain components of overstory tree canopy, such as two-aged and uneven-aged management.

In 1995, during the analysis for the Mitkof Landscape Design, small habitat conservation areas that encompassed important wildlife habitat were recommended for Mitkof Island. These were later incorporated into the Forest Plan (1997, as amended) as small old-growth habitat reserves. Much deliberation occurred during the Mitkof Landscape Design analysis and the environmental analysis for the Woodpecker Project Area regarding the protection of high value deer habitat on Mitkof Island and especially within this project area. The deer habitat is relatively poor on Mitkof Island compared to many other areas of the Tongass National Forest. Most of the higher value deer winter habitat on Mitkof

2003 Record of Decision

Island is located within the Woodpecker Project Area. Because of this, the small old-growth habitat reserves within this area were designed to include much of the high value deer winter habitat. For more information, see the Biodiversity section in Chapter 3 of the Final EIS.

Approximately 4.8 miles of classified roads will be constructed, of which three miles will be closed. All temporary roads will be closed after timber harvest. The road construction for this project will increase the current road density from 0.68 to 0.69 miles per square mile for Mitkof Island. Therefore, the level of access to subsistence uses will increase slightly with the loop extension of Road 6282 and the part of Road 40822 that will remain open. This includes the effects of placing ten miles of classified roads into storage to reduce maintenance costs as approved by the 2002 Decision. For more information, see the Transportation Section in Chapter 3 of the Final EIS.

Most of the high value deer winter habitat that is available to be harvested is not proposed for timber harvest as part of the Woodpecker Project. In the units where harvest is proposed, only two-acre patches will be harvested and 75 percent of the stand will remain. The other units contain deer winter habitat of varying values. The effects on this habitat will be reduced by the use of varying amounts of tree retention. For more information, see the Issue 1, Deer Hunting section of Chapter 3 in the Final EIS.

The Selected Alternative reflects a reasonable balance between the projected need for timber from the project area to help meet the Forest Plan, ANILCA, and TTRA timber-related objectives, and the continued protection of subsistence uses and resources. Impacts on subsistence use have been minimized through the selection and design of the individual harvest units and road management objectives. I have determined that reasonable measures to minimize impacts on subsistence have been adopted to the maximum extent practicable while still meeting the purpose and need for this project.

Coastal Zone Management Act

The Coastal Zone Management Act of 1972 (CZMA), while specifically excluding Federal lands from the coastal zone, requires that a Federal agency's activities be consistent with the enforceable standards of a State's coastal management program to the maximum extent practicable when the agency's activities affect the coastal zone.

The enforceable standards for timber harvest activities are found in the State Forest Practices Act. The standards and guidelines for timber harvest activities in the Woodpecker Project Area meet or exceed the standards in the State Forest Practices Act.

I have determined that the proposed activities are consistent with the Alaska Coastal Management Program to the maximum extent practicable. The State of Alaska has concurred with my determination.

Consumers, Civil Rights, Minorities and Women

No negative impacts to the civil rights of individuals or groups, including minorities and women, are anticipated to be associated with this project. Additional information can be

found in Chapter 3 and Appendix H of the Forest Plan Final EIS, Part 2, as well as Chapter 3 of the Woodpecker Project Area Final EIS.

Executive Orders

EO 11593 (Historic Protection) - Executive Order 11593 directs Federal agencies to provide leadership in preserving, restoring and maintaining the historic and cultural environment of the Nation. The consultation required in accordance with Section 106 of the National Historic Preservation Act for the Woodpecker Project Area meets the intent of this Executive Order.

EO 11988 (Floodplains) - Executive Order 11988 directs Federal agencies to take action to avoid, to the extent practicable, the long and short-term adverse impacts associated with the occupancy and modification of floodplains. No roads will be constructed across floodplains, and timber harvest will not occur on any floodplain.

EO 11990 (Wetlands) - Executive Order 11990 requires Federal agencies to avoid, to the extent practicable, the long and short-term adverse impacts associated with the destruction or modification of wetlands. The ground-disturbing activities avoid most identified wetlands; however, many small wetlands or muskegs occur as inclusions within forested areas. These areas may be altered by timber harvest or temporary road construction. Techniques and practices required by the Forest Service serve to maintain the wetland attributes, including values and functions. It is estimated there will be only minimal loss of wetlands with any of the alternatives. Soil moisture regimes and vegetation on some wetlands may be altered in some harvest units; however, these altered acres would still be classified as wetlands and would still function as wetlands in the ecosystem.

Because wetlands are found throughout the project area, it is not feasible to avoid all wetland areas. However, there are no development activities planned on the more biologically significant wetlands.

EO 12898 (Environmental Justice) - Executive Order 12898 directs Federal agencies to identify and address the issue of environmental justice, i.e. adverse human health and environmental effects of agency programs that disproportionately impact minority and low-income populations. The order specifically directs agencies to consider patterns of subsistence hunting and fishing when an agency action may affect fish or wildlife. I have determined that implementation of this project will not cause adverse health or environmental effects that would disproportionately impact minority and low-income populations.

EO 12962 (Recreational Fisheries) - Executive Order 12962 directs Federal agencies to conserve, restore and enhance aquatic systems to provide for increased recreational fishing opportunities nationwide. Section 1 of the Executive Order is most pertinent to the proposed activity. Section 1 directs Federal agencies to evaluate effects on aquatic ecosystems and recreational fisheries, develop and encourage partnerships, promote

2003 Record of Decision

restoration, provide access, and promote awareness of opportunities for recreational fishery resources.

The effects of this project have been evaluated throughout the Final EIS, including effects to freshwater and marine resources. Partnerships continue to be used to leverage Federal project funds to address water quality concerns in some areas of the Tongass National Forest, although none have been proposed for recreational fisheries in conjunction with this project.

The effects on aquatic systems are minimized through project design, application of Forest Plan standards and guidelines, BMPs and site-specific mitigation measures. Recreational fishing opportunities will remain essentially the same because aquatic habitats are protected through implementation of BMPs and riparian buffers, and may result in slightly increased opportunities. I have determined that this project will have no significant effect on recreational fisheries.

Federal and State Permits

Federal and State permits necessary to implement the authorized activities are listed in Chapter 1 of the Final EIS.

Implementation Process

Implementation of any part of this decision may occur no sooner than 50 days following publication of the legal notice of the decision in the *Juneau Empire*, published in Juneau, Alaska, if no appeal is received.

This project will be implemented in accordance with Forest Service Manual (FSM) and Handbook (FSH) direction for Timber Sale Project Implementation in FSM 2431.3 and FSH 2409.24. This direction provides a bridge between project planning and implementation and will ensure execution of the actions, environmental standards, mitigation approved by this decision, and compliance with TTRA and other laws. All applicable Best Management Practices (BMPs) will be applied.

Implementation of all activities authorized by this Record of Decision will be monitored to ensure that they are carried out as planned and described in the Final EIS.

The Appendix of this ROD contains the harvest unit design cards and road cards for this decision. These cards are an integral part of this decision because they document the specific resource concerns, management objectives, and mitigation measures to govern the layout of the harvest units. These cards will be used during the implementation process to assure that all aspects of the project are implemented within applicable standards and guidelines and that resource impacts will not be greater than those described in the Final EIS. Similar cards will be used to document any changes to the planned layout as the actual layout and harvest of the units occurs with project implementation.

The implementation record for this project will display: (1) each harvest unit as actually implemented, (2) any proposed changes to the design, location, standards and guidelines, or other mitigation measures for the project, and (3) authorization of the proposed changes.

Procedure for Changes During Implementation

Proposed changes to the authorized project actions will be subject to the requirements of the National Environmental Policy Act (NEPA), the National Forest Management Act of 1976 (NFMA), Section 810 of the Alaska National Interest Lands Conservation Act, the Tongass Timber Reform Act (TTRA), the Coastal Zone Management Act (CZMA), and other laws concerning such changes.

In determining whether and what kind of NEPA action is required, the Forest Supervisor will consider the criteria set forth in the Code of Federal Regulations (40 CFR 1502.9(c)), and FSH 1909.15, Sec. 18 for determining whether to supplement an existing Environmental Impact Statement (EIS). In particular, the Forest Supervisor will determine whether the proposed change is a substantial change to the unit or road as planned and approved, and whether the change is relevant to environmental concerns. Connected or interrelated proposed changes regarding particular areas of specific activities will be considered together in making this determination. The cumulative impacts of these changes will also be considered.

The intent of field verification is to confirm inventory data and to determine the feasibility and general design and location of a unit or road, not to locate final boundaries or road locations. Minor changes are expected during implementation to better meet on-site resource management and protection objectives. Minor adjustments to unit boundaries are likely during final layout for the purpose of improving logging system efficiency. This will usually entail adjusting the boundary to coincide with logical logging setting boundaries. Many of these minor changes will not present sufficient potential impacts to require any specific documentation or other action to comply with applicable laws. Some minor changes may still require appropriate analysis and documentation to comply with FSH 1909.15, sec. 18.

Right to Appeal

This decision is subject to administrative appeal. Organizations or members of the general public may appeal this decision according to Title 36 Code of Federal Regulations (CFR) part 215. The appeal must be filed within 45 days of the date that legal notification of this decision is published in the *Juneau Empire*, the official newspaper of record. The written Notice of Appeal must be filed with:

Regional Forester, Alaska Region
U.S. Department of Agriculture, Forest Service
P.O. Box 21628
Juneau, AK 99802-1628

It is the responsibility of those who appeal a decision to provide the Regional Forester with sufficient written evidence and rationale to show why the decision by the Forest Supervisor should be changed or reversed. This written Notice of Appeal must:

1. State that the document is a Notice of Appeal filed pursuant to 36 CFR Part 215.
2. List the name, address, and, if possible, the telephone number of the appellant.
3. Identify the decision document by title and subject, date of the decision, and name and title of the Responsible Official.
4. Identify the specific change(s) in the decision that the appellant seeks or portion of the decision to which the appellant objects.
5. State how the Responsible Official's decision fails to consider comments previously provided, either before or during the comment period specified in 36 CFR 215.6 and, if applicable, how the appellant believes the decision violates law, regulation or policy.

For additional information concerning this decision, contact Patricia A. Grantham, District Ranger, Petersburg Ranger District, P.O. Box 1328, Petersburg, AK 99833, or call (907) 772-3871.



FORREST COLE
Forest Supervisor

9.12.03

Date

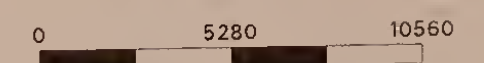
LEGEND

- *Amended by 2002 Record of Decision



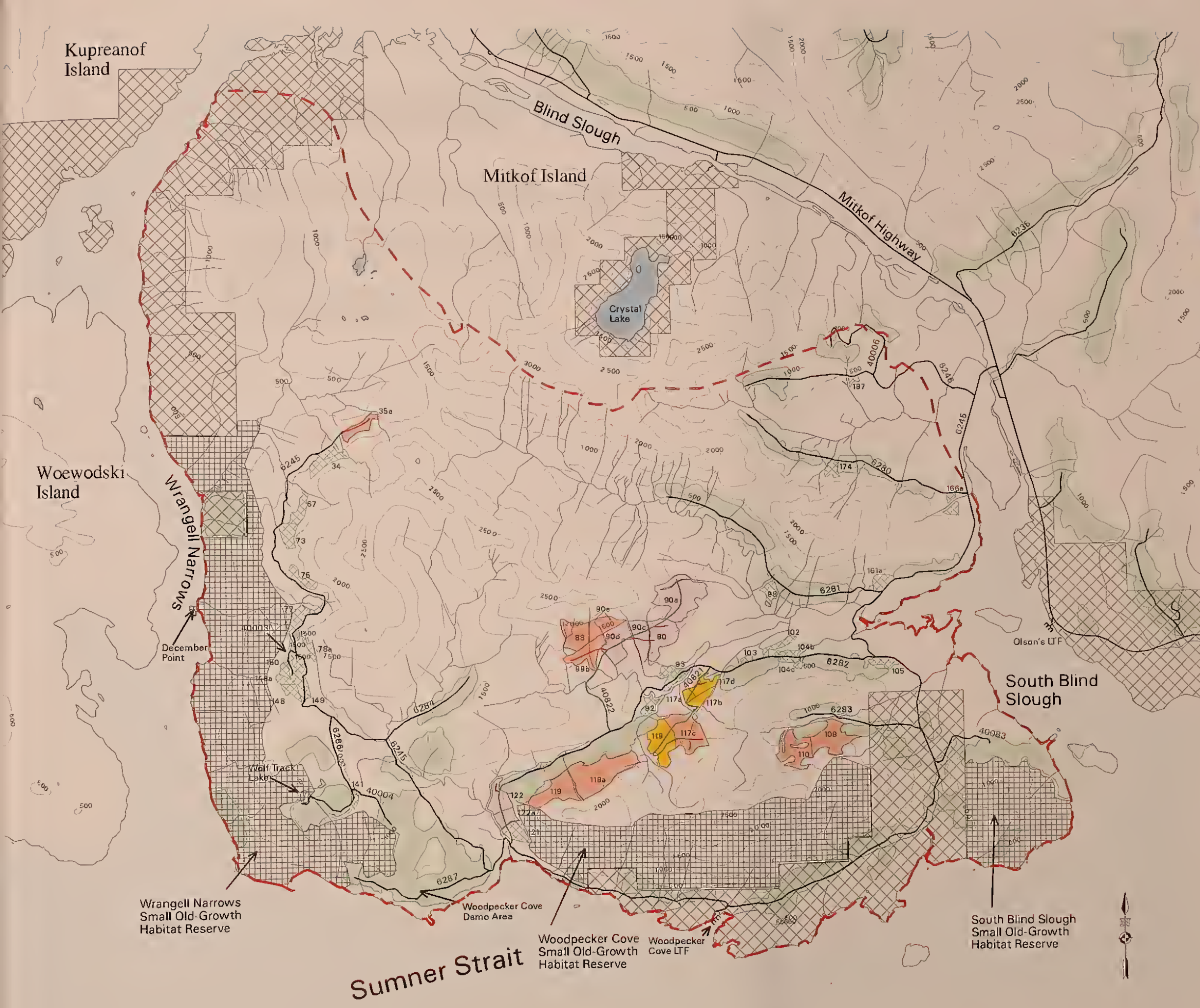
SOUTHEAST ALASKA VICINITY MAP
MAP AREA SHOWN IN ORANGE

ROD-1



Scale is 1 inch = 5280 feet

L:\coll.petersburg\stikiner\10.fs.fed.us\info\alex\ndt\gts\projects\woodpocket\rod2003\plots\alt6_03 map
rerodtmpl.aml calling alt6_03.aml
10/10/03



Appendix

Activity Cards for 2003 Record of Decision

Appendix

Activity 1: Introduction

Activity 2: Introduction

Activity 3: Introduction

Introduction to Activity Cards

Activity cards are used to explain site-specific proposed projects and any resource concerns and mitigations. These activities include: (1) timber harvest units, and (2) proposed roads needed for timber harvest. Both narratives and maps showing site-specific information are provided.

The first section, Introduction to Unit Cards, explains the harvest treatments for this entry plus the long-term objectives. Following that is a summary of which measures can be used to mitigate resource concerns. These mitigation measures can be either from the Forest Plan or project-specific.

The Introduction to Unit Cards is followed by a narrative card and a map for each harvest unit in the Selected Alternative. These units are in numerical order, but not all the units from the original unit pool were included. The maps show all proposed adjacent units in the Selected Alternative.

The second section describes the proposed management for those planned new roads. The Introduction to Road Cards explains the terminology used for the Road Management Objective narratives. A map showing all the roads and their desired future management is also included.

The Road Management Objective (RMO) cards are listed in numerical order, but the major roads (the 6000 series) are listed before the lower standard roads (the 40000 series). Site-specific design criteria follow the road card for each planned road.

Introduction to Unit Cards for 2003 Record of Decision

Unit Card Header Information

Each unit card has a header block with the following information. This information is used to generally describe the stand's size, location, and volume removed.

Unit size – estimate of acres using aerial photos and GIS information. No units have been flagged on the ground or traversed at this time.

Aerial Photo – the identification number of the most recent aerial photograph taken in 1998-1999.

Volume Strata – This is the number of acres broken out by volume strata. Volume strata is defined in the Forest Plan and explained under Vegetation in Chapter 3 of the Final EIS. The total volume strata acres do not always add up to the total unit size, since some units contain non-forested areas.

VCU – the Value Comparison Unit as determined by the Forest Plan

Land Use Designation - the management prescription allocated by the Forest Plan

Est. Timber Volume – an estimated number of board feet to be harvested (measured in thousand board feet (mbf)). This was derived from GIS and field estimates. A cruise will be done during implementation to determine a more accurate volume.

Within Inventoried Roadless Area? – whether the unit is within the Crystal Inventoried Roadless Area as described in the Forest Plan. This is not the same as the roaded/roadless boundary shown on some of the unit maps. That boundary refers to the roaded/roadless boundary as defined by the court in *Sierra Club v. Rey* (J00-0009 (JKS)).

Harvest Treatments

The harvest treatment descriptions on the unit cards are basic guidelines to achieve resource concerns and logging system operability for the unit. The harvest treatments describe the appearance of the residual stands after harvest. It includes the amount of retention and whether trees will be removed or retained in patches or dispersed throughout the stand. A

Introduction to Unit Cards

more detailed explanation of the harvest treatment is listed below.

Silvicultural Systems

Silvicultural systems have been developed to meet the management objectives based on the site and Forest Plan direction. These objectives include retaining stand legacy or old-growth characteristics to maintain biodiversity, economics, logging feasibility and protection of the soil, watershed, wildlife habitat, and scenery values of the proposed unit. Adjacent areas were taken into consideration when developing these objectives.

A complete silvicultural prescription for the entire length of the rotation has been written for each stand selected for harvest. These prescriptions provide guidance for treatments following this proposed timber harvest, including subsequent entries, cedar interplanting, thinning, pruning, and fertilization through the entire rotation.

Silvicultural prescriptions will include these unit cards plus the sale layout and marking guidelines and will be completed for each of the timber harvest units that are included in the Woodpecker Project Area Record of Decision. Minor changes are expected during implementation to better meet on-site resource management and protection objectives. Minor adjustments to unit boundaries are also likely during final layout for the purpose of improving logging system efficiency or for site conditions.

These cards will be used during the implementation process to assure that all aspects of the project are implemented within applicable standards and guidelines. If needed during sale implementation, an interdisciplinary team will discuss any changes. Subsequent analysis and supplements to the EIS may be needed, as determined by the Responsible Official. Similar cards will be used to document any changes to the planned layout as the actual layout and harvest of the units occurs with project implementation.

The harvest treatments found on the unit cards are descriptions of what will occur under various silvicultural systems. Two silvicultural systems based on the number of age classes (uneven-aged and two-aged) and three regeneration methods (group selection, single tree selection, and clearcut with reserves) were used to develop these harvest treatments. The harvest treatment for a proposed unit for the Woodpecker Project Area is the initial entry for the silvicultural prescription.

Uneven-aged Management

An uneven-aged silvicultural system with a regeneration method of group selection is described in the unit cards as a harvest method where 50 – 66 percent or 75 percent of the stand is retained. Trees are to be removed in 2-acre or less openings and corridors, and 3-acre or less openings and corridors.

Introduction to Unit Cards

Removal of patches of trees

Merchantable trees (trees greater than 9 inches in diameter) would be harvested in small patches to form a mosaic of irregularly shaped openings within the stand. Smaller trees may be left in this area if the larger trees can be safely removed. Each group harvested would consist of a mixture of tree sizes. These groups will provide small foraging areas interspersed with cover. Groups of trees infected with dwarf mistletoe would be targeted for removal to avoid infection for the regeneration. Groups with windfirm characteristics are a high priority to leave. The large trees provide habitat for cavity nesters and marten. Each harvested opening will regenerate, creating a patch of trees with a uniform age and height. This will maintain or create a stand of three or more distinct size classes in small groups. The appearance of the residual stand mimics natural blowdown patches. In 200 years, at the end of the scheduled cutting cycles, the result will be an uneven-aged stand.

Cable yarding and shovel yarding will be used to harvest the trees within the groups. Cable yarding results in a more linear pattern up-and-down the slope to form a corridor. There is more flexibility for yarding uphill since there is more control over the tree being removed. Shovel yarding can harvest groups, but these groups would either be connected by a narrow path or adjacent to the road.

Three types of removal based on the size of the patches to be harvested and the amount of trees to be retained were recommended for the selected harvest units. These are: harvest of two-acre or smaller patches with 75 percent retention, harvest of two-acre or smaller patches with 50-66 percent retention, and harvest of three-acre or smaller patches with 50-66 percent retention. These are described below.

75 percent retention

Twenty-five percent of the area within the unit would be harvested in patches two-acres or less in size. The selection of these patches will also be based on the basal area of the stand, resulting in the same percentage of basal area removed. This prescription meets the Marten Standards and Guidelines. To minimize the possibility of windthrow in areas with windthrow potential, the patches will be designed with irregular boundaries. Additional entries removing up to 25 percent of the basal area within the unit would occur approximately every 50 years (the cutting cycle).

50-66 percent retention

One-third to one-half of the area within the unit would be harvested in patches up to two acres or less in size. The selection of these patches will also be based on the basal area of the stand, resulting in the same

Introduction to Unit Cards

percentage of basal area removed. This prescription meets the Marten Standards and Guidelines. To minimize the possibility of windthrow in areas with windthrow potential, the patches will be designed with irregular boundaries. One additional entry will likely be made in 100 years (the cutting cycle) following the initial entry.

-or-

One-third to one-half of the area within the unit would be harvested in patches up to three acres in size to meet Visual Quality Objectives. The selection of these patches will also be based on the basal area of the stand, resulting in the same percentage of basal area removed. To minimize the possibility of windthrow in areas with windthrow potential, the patches will be designed with irregular boundaries. One additional entry will likely be made in 100 years (the cutting cycle) following the initial entry.

An uneven-aged silvicultural system with a regeneration method of single tree selection is described in the unit cards as a harvest method where 50 – 66 percent or 75 percent of the stand is retained. Scattered trees and/or clumps of trees are to be removed.

Removal of trees distributed across the stand

This will regenerate and maintain a multi-aged structure by removing some trees in various size classes distributed across the stand. The trees to be harvested would be selected using criteria such as species, diameter limits or spacing. A range of diameters, or everything above or below a certain diameter limit may define the trees selected for harvest. Different diameters may be used for different species. The percent distribution of tree species harvested will be similar to the naturally-occurring species composition. The diameter limits may need to be based on statistically accurate cruise data determined at the time of implementation to ensure that the percent of retention will be met. Other units may have each tree marked on the ground according to the management objectives. The resulting stand may have small openings and/or individual trees harvested throughout the stand. Sometimes other trees may be harvested to create safe working conditions or for logging operability. The stand after harvest will retain old-growth characteristics but may fall within a lower volume strata.

Removing trees throughout the stand will retain a continuous large tree canopy following harvest while continuing to manage the stand for timber production. The residual stand will have structural diversity that will provide wildlife habitat and maintain scenic quality. This will maintain or create a stand of three or more distinct size classes distributed throughout the stand. In 200 years, at the end of the scheduled cutting cycles, the result will be an uneven-aged stand. Cable-yarding systems will be restricted to uphill yarding and some short

Introduction to Unit Cards

(less than 300 ft. slope distance from yarder) downhill yarding. Cable corridor widths will be minimized and lateral yarding will be used to access the individual selected trees. Shovel yarding is effective but some trees other than the selected ones may need to be removed for operability.

75 percent retention

Twenty-five percent of the trees would be harvested within the unit. Additional entries removing up to 25 percent of the trees would occur approximately every 50 years (the cutting cycle). Marten Standards and Guidelines would be used to select some of the trees retained in areas of high value marten habitat. This would mean leaving large trees that would be good for marten habitat – see the guidelines under mitigation measures for marten. Trees displaying windfirm characteristics would be retained.

50 to 66 percent retention

One-third to one-half of the trees would be removed. One additional entry will likely be made in 100 years (the cutting cycle) following the first entry. Marten Standards and Guidelines would be used to select some of the trees retained in areas of high value marten habitat. This would mean leaving large trees that would be good for marten habitat – see the guidelines under mitigation measures for marten. Trees displaying windfirm characteristics would be retained.

Two-aged Management

A two-aged silvicultural system with a regeneration method of clearcut with reserves is described in the unit cards as a harvest method where 20-30 percent of the stand is retained as scattered trees or in clumps of trees.

Retention of 20-30 percent reserve trees

Some of the trees will be reserved as legacy trees through the 200-year rotation. These reserve trees may be dispersed throughout the stand or in clumps and can be merchantable or unmerchantable. Reserve trees may be of any size and should be relatively windfirm. In stands where there is possible windthrow, reserve trees may be positioned to provide a windfirm buffer to adjacent stands and riparian areas. The residual stand will have a two-layered canopy structure with two or more age classes of trees. In areas of high value marten habitat, the Marten Standards and Guidelines for tree size and numbers of trees will be followed to determine the trees to be left. This will include at least seven large standing trees and smaller trees for stand structure to retain 20-30 percent of the basal area.

The large trees that remain will provide wildlife habitat for old-growth associated species, such as cavity nesters and roosts for foraging raptors. These trees will also provide stand structure that will lessen the effect for

Introduction to Unit Cards

scenery concerns. This will maintain or create a stand of two or more distinct size classes. At the end of the 200-year rotation, the result will be a mature stand with some older trees.

Where cable-yarding systems are used, the trees would be left in clumps along splitlines rather than scattered for downhill yarding. Uphill cable yarding can leave some scattered trees along with clumps. Shovel yarding can leave scattered residual trees but some clumps may be left.

Logging/Transportation Systems

This section lists the logging system and whether a classified road needed for long-term management or temporary road construction is needed for access to the unit. More information on the roads is located on the Road Cards that follow the unit cards.

Resource Concerns and Mitigations

Some resource concerns are mitigated by using silvicultural prescriptions other than clearcutting. In the Woodpecker Project Area, most of the wildlife, scenery, and windthrow concerns are mitigated with the silvicultural system. Other resource concerns, such as watershed, soils, and fisheries concerns are mitigated by unit design.

Marten

The following Forest-wide Standards and Guidelines for the American Marten (Forest Plan, pages 4-118 and 4-119) were applied to harvest units in high value marten habitat in the Woodpecker Project Area:

- Retain approximately 10-20 percent of the original stand structure.
- Retain an average of at least four large trees per acre (20-30" DBH or greater) for future snag recruitment. Where not available, substitute the next largest trees.
- Retain an average of at least three large decadent (dead or dying) trees per acre (20-30" DBH or greater). Where not available, substitute the next largest decadent trees.
- Retain an average of at least three pieces per acre of down material (logs 20-30" or greater in diameter at the large end and 10' long), generally distributed throughout the harvest unit.

Introduction to Unit Cards

- Retained trees should have a reasonable assurance of windfirmness.
- Consider adding smaller or younger trees for future structure recruitment and to improve windfirmness.

Implementation of these guidelines helps meet the objective to manage high value marten habitat to retain features of forest stand structure important to marten habitat use. Additional habitat is provided by an old-growth habitat reserve system, which has been adopted and implemented in accordance with Forest Plan direction. Habitat is also retained in beach, estuary and riparian buffers.

Loss of Old-Growth Habitat

Loss of old-growth habitat is a wildlife concern for most of the proposed harvest units. The use of uneven-aged management mitigates this concern for many units. Another method of mitigating the loss of old-growth habitat is to leave reserve trees of all ages and sizes, with an emphasis on snags and dying trees. The retention of these reserve trees is part of two-aged management.

Sitka Black-Tailed Deer

Several harvest treatments maintain habitat value to deer through time. Removal of trees in patches will create a mosaic of old-growth forest with regeneration in the openings. If 25 percent of a unit were harvested by removal of patches of trees, the harvested 25 percent will have deer winter habitat values similar to a clearcut, and the other 75 percent of the unit will have old-growth values. When 25 percent of the trees dispersed throughout the stand are removed, the volume of the stand will be lower, but the stand will retain some old-growth characteristics.

Raptor and Great Blue Heron Nests

Habitat buffers will be established around all known or subsequently discovered raptor and great blue heron nests, in accordance with Forest Plan standards and guidelines. Timing restrictions will be placed on activities around the nests during active nesting and fledging periods to minimize disturbance to the birds using the nests. Standards used to protect nest sites vary depending on the type of nest located.

Waterfowl Nesting and Brood-Rearing

Wetlands that are known or likely to be used by waterfowl for nesting, brooding, and rearing have been identified. Buffers of 330-foot width have been placed around these wetlands, according to Forest Plan standards and guidelines. Timing clauses have been placed on these buffers and on adjacent units to restrict logging and roading activities, generally during the period April 1 to July 31, if waterfowl activity is present.

Windfirmness

Windthrow concerns were mitigated through selection of windfirm trees for retention, unit design and silvicultural prescriptions.

Where possible, trees remaining in harvested units will display windfirm characteristics. This will occur under uneven-aged management where

Introduction to Unit Cards

individual trees are to be removed and under two-aged management where individual trees or small clumps will be left dispersed throughout the unit. Some of the characteristics of windfirm trees include:

- open-grown trees, which have been exposed to storm winds throughout their life,
- dominant trees with crowns well above the average stand height,
- short trees with a low form class and high stem taper,
- straight trees, with well-formed stems and no lean,
- no stem or root decay and no stem swelling, and
- western redcedar, Alaska yellow-cedar, and immature alder species (Harris, 1989).

In two-aged managed units where a windthrow potential occurs, windfirm buffers may be designed to mitigate the effects on adjacent stands. A windfirm buffer would generally be about 100 feet wide along an irregular unit boundary and consist of approximately 25 dispersed small diameter trees per acre (usually under 18" DBH).

In many units uneven-aged management prescriptions mitigate windthrow concerns by harvesting small patches of trees (2-3 acres). These patches will be irregularly shaped and target trees infected with dwarf mistletoe. Patches with windfirm characteristics will be a high priority to retain in these units.

Water Quality and Fisheries

All known streams are shown on the unit card maps in relation to the location of existing roads and approximate location of proposed roads. These streams, and any additional streams, if found, will be protected by following the Forest Plan Riparian Standards and Guidelines listed below. Class IV streams will be protected following Best Management Practices (Forest Plan, Appendix C). Timing restrictions for in-stream work are located on the road cards.

Units were designed so that all Class I and Class II streams and their associated no-programmed-timber harvest buffers are outside of the unit boundaries.

Riparian Management Areas

Riparian Forest-wide Standards and Guidelines are a combination of no harvest buffers and windfirm buffers along streams and yarding guidelines to protect soil from erosion based on stream classes and channel types. For full descriptions of the standards and guidelines, see the Forest Plan, (pages 4-53 to 4-73).

Introduction to Unit Cards

Riparian Standards and Guidelines for Timber Harvest

The Tongass Timber Reform Act (TTRA) mandates the use of minimum 100-foot wide buffer strips along both sides of all Class I and Class II streams that flow into Class I streams. This was incorporated into the Forest Plan Riparian Standards and Guidelines as "No commercial harvest within 100 feet of Class I streams and Class II streams that flow directly into Class I streams."

The minimum 100-foot-wide buffer strips mandated by TTRA are expanded for some channel types to include an additional buffer where no programmed commercial timber harvest can occur. The need for this no-harvest buffer is determined for streams using the Aquatic Habitat Management Unit (AHMU) Class and the process group. The width is based either on the height of a site-potential tree, the presence of riparian vegetation or soils, flood plains, or fens. The height of a site-potential tree is determined by the productivity of the site and ranges from 110 feet to 140 feet.

Windfirm buffers

Windthrow events are the dominant agent for disturbance within the Woodpecker Project area. The affects of these events on the landscape vary depending on the position of the windthrow in the landscape, the magnitude of its occurrence, and its proximity to streamside riparian buffers. Small-scale windthrow in combination with bank undercutting plays an integral part in maintaining healthy fish habitat. These natural events supply the stream with the large woody debris needed for pool formation, hiding cover, sediment retention, and energy dissipation.

When large woody debris is parceled to streams over long periods of time, the tools streams need for habitat maintenance are available. However, when streamside windthrow occurs on larger scales, loss of wildlife corridors, increased sedimentation, channel scour, and debris jam formation are often the results. More importantly, the mechanism that allows the recruitment of large woody debris to a stream over time for the maintenance of fish habitat will be compromised. To mitigate these effects, the Forest Plan has set standards and guidelines for the establishment of windfirm buffers.

An appropriate distance will be managed beyond the no-harvest zone, for all buffers within and adjacent to proposed units. This will provide for a reasonable assurance of windfirmness of the Riparian Management Area buffer, paying special attention to the area within one site-potential tree height of the Riparian Management Area. Other management techniques may reduce the occurrence of windthrow to the riparian buffer. The use of partial harvest retention in or around streamside buffers is applied in

Introduction to Unit Cards

all units. The partial harvest units that retain 20 to 75 percent of basal area are expected to dissipate wind energy before it reaches riparian buffers.

Logging System Controls

Log yarding practices are based on channel type and stream class. Some yarding guidelines include: partial or full suspension of logs, minimizing the exposure of mineral soil, and split-line yarding on either side of the stream. The objective is to minimize alder growth and formation of new channels (BMP 13.9).

Best Management Practices

The following Best Management Practices (BMPs) are applied to streams in the Woodpecker Project Area, as specified in the Forest Plan (pages C-1 to C-3). The BMPs are cited on the Unit Cards where appropriate. Not all BMPs apply to every stream.

BMP 12.6 (Riparian Area Designation and Protection) - To identify riparian areas and their associated management activities.

BMP 12.6a (Buffer Design and Layout) - To design streamside buffers to meet objectives defined during the implementation of BMP 12.6.

BMP 13.16 (Stream Channel Protection - Implementation and Enforcement) - To provide site-specific stream protection prescriptions consistent with objectives identified under BMPs 12.6 and 12.6a. Objectives may include the following:

- Maintain the natural flow regime.
- Provide for unobstructed passage of storm flows.
- Maintain integrity of the riparian buffer to filter sediment and other pollutants.
- Restore the natural course of any stream that has been diverted as soon as practicable.
- Maintain natural channel integrity to protect aquatic habitat and other beneficial use.
- Prevent adverse changes to the natural stream temperature regime.

BMP 13.9 (Determining Guidelines for Yarding Operations) - To select appropriate yarding systems and guidelines for protecting soil and water resources.

Introduction to Unit Cards

BMP 14.6 (Timing Restrictions for Construction Activities) -
Minimize erosion potential by restricting the operating schedule and conducting operations during lower risk periods.

Process Groups and Channel Types (Forest Plan, page D-3)

A process group describes streams with similar interrelationships between watershed runoff, landform relief, geology, and glacial or tidal influences on erosion and deposition. A channel type more precisely characterizes a stream and helps predict the probable responses to natural and human influences. Channel types incorporate other aspects such as gradient, pattern, stream bank incision and containment and riparian area vegetation communities. See the Forest Plan, Figure D-1 (page D-4) for a visual representation of the typical distribution of channel process groups. The following table shows the Forest Plan codes used on the unit card narratives. Each unit card summarizes the protection. Only the channel types found in the units for the 2003 decision are listed.

Table A-1. Channel Types in the Selected Harvest Units

Process Group	Channel Type Code	Channel Type Description
Alluvial Fan	AF2	High Gradient Alluvial Cone Channel
High Gradient Contained	HC0	Small high gradient contained channel
	HC1	Shallowly Incised Muskeg Channel
	HC2	Shallowly to Moderately Incised Footslope Channel
	HC3	Deeply Incised Upper Valley Channel
	HC5	Shallowly Incised Very High Gradient Channel
	HC6	Deeply Incised Mountain Slope Channel
Moderate Gradient Contained	MC1	Narrow Shallow Contained Channel
	MC2	Moderate Width and Incision Contained Channel
Moderate Gradient, Mixed Control	MM1	Narrow Mixed Control Channel
Palustrine	PA1	Narrow Placid Flow Channel

Introduction to Unit Cards

Scenery

The standards and guidelines for the scenery management of an area are determined by the number of viewers, distance from the viewer (Distance Zones), and the ability of the landscape to absorb change (Visual Absorption Capability, or VAC).

Distance Zones

- Foreground (0 - ½ mile)
- Middleground (½ - 3 to 5 miles)
- Background (3 to 5 miles and greater)

Visual Absorption Capability

- Low VAC - Steep slopes and uniform vegetation
- Intermediate VAC – Gentle slopes, some variation in vegetation
- High VAC – Flat muskeg and forest mosaics

Visual Quality Objectives

The following Visual Quality Objectives from the Forest Plan provide standards for management based on the landscape's scenic characteristics and public viewing concern.

Retention: Changes in the landscape must not be visually evident to the casual forest observer.

Partial Retention: Changes in the landscape may be visually evident, but must be integrated into and visually subordinate to the surrounding landscape and should not attract attention.

Modification: Changes in the landscape may visually dominate the surrounding natural landscape, however they should be compatible with the surrounding natural landscape.

Maximum Modification: Management activities may visually dominate the characteristic or surrounding natural landscape.

Scenery Standards and Guidelines by Land Use Designation

The guidelines for scenery differ between the three Land Use Designations (LUDs) for units in the Selected Alternative. The selected units are in the Scenic Viewshed, Modified Landscape, and Timber Production LUDs. The primary scenic objective for the Scenic Viewshed LUD is to retain a natural-appearing landscape over time, if viewed from Visual Priority Travel Routes and Use Areas. For the Modified Landscape LUD, the primary scenic objective is to minimize development in the near viewing area while allowing a sustained yield of timber and mix of other resource activities in other viewing areas over

Introduction to Unit Cards

time. The Timber Production LUD focuses on achieving visual characteristics similar to natural occurrences in the near viewing area while allowing a sustained yield of timber.

Visual Quality Objectives for Units in the Scenic Viewshed LUD

Partial Retention - Units 35a, 90, 90a, 122, 122a

All units are in areas of low to intermediate visual absorption capability (VAC).

Visual Quality Objectives for Units in the Modified Landscape LUD:

Modification - Units 90c, 98, 109, 110, 117a, 117b, 117c, 117d, 118, 119, 119a

All units are in areas of high visual absorption capability (VAC).

Visual Quality Objectives for Units in the Timber Production LUD:

Modification – Units 88, 88b, 90d, 90e

Unit Card Narratives and Maps

Woodpecker Project Area Unit Card Narrative

Unit #: 35a	Unit Size : 22	acres	
Aerial Photo: 1998 1798-233	Volume strata: 15	acres high	
VCU: 448	7	acres medium	
Land Use Designation: Scenic Viewshed, Modified Landscape, Timber Production			
Within Inventoried Roadless Area? No	Estimated timber volume: 350	mbf	

Harvest Treatment: 50-66% retention, remove trees in 2-acre or less corridors

Logging/Transportation Systems: Cable yarding / one temporary road

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type HC2
Stream 2 is Class II, Channel Type HC3
Stream 3 is Class III, Channel Type HC6
Stream 4 is Class III, Channel Type AF2

Mitigation: *Stream 1:* No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).
Stream 2: No commercial timber harvest within 100'. No programmed commercial timber harvest within the Riparian Management Area, defined as 100'. Apply BMPs 12.6, 12.6a, and 13.16.
Stream 3: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6, 12.6a, and 13.16.
Stream 4: No commercial timber harvest within the 140' Riparian Management Area, or within the active portion of the alluvial fan. Apply BMPs 12.6, 12.6a, and 13.16.

Concern: A temporary road from Road 6245 provides continuous landings along the lower portion of the unit.

Mitigation: Remove all drainage structures from the temporary road to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

Soils

Concern: The southeastern boundary of the unit is adjacent to an area of steep slopes over 72%.

Mitigation: The unit boundary was modified to avoid the steep slopes.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.



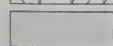
















Scenery

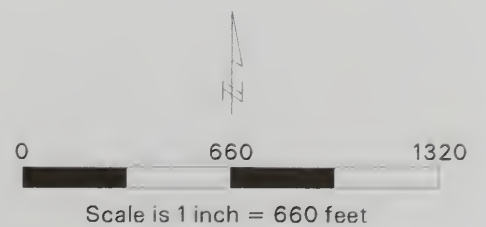
Concern: A portion of the unit is visible from Wrangell Narrows and Crystal Mountain.

Mitigation: Retention of at least 50% of the stand and unit size will meet the Partial Retention VQO.

2003 Record of Decision Unit 35a



- | | | | |
|--|-------------------------------|---|---------------------------|
|  | Existing Managed Stands |  | AHMU-Class 2 Streams |
|  | Riparian Management Area |  | AHMU-Class 3 Streams |
|  | Beach Buffer |  | AHMU-Class 4 Streams |
|  | 2002 Record of Decision Units |  | Existing Classified Roads |
|  | Old-growth Reserves |  | Existing Closed Roads |
|  | Lakes |  | Proposed Classified Roads |
|  | Proposed Unit Boundaries |  | Proposed Temporary Roads |
|  | Adjacent Unit Boundaries |  | 500-ft. Contour Interval |
|  | AHMU-Class 1 Streams |  | 100-ft. Contour Interval |
| | |  | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	88	Unit Size :	45 acres	
Aerial Photo:	1999 2398-88	Volume strata:	45	acres high
VCU:	452		0	acres medium
Land Use Designation:	Timber Production			
Within Inventoried Roadless Area?	Yes	Estimated timber volume:	470	mbf

Harvest Treatment: 50-66% retention, remove trees dispersed throughout the unit

Logging/Transportation Systems: Helicopter yarding. Use landings on the proposed temporary road in Unit 88b.

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Streams 1, 2, 3, and 4 are Class III and Channel Type HC5.

Mitigation: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

Soils

Concern: The north central unit boundary is adjacent to steep slopes > 72%.

Mitigation: Modify boundary to avoid any unstable slopes.

Transportation

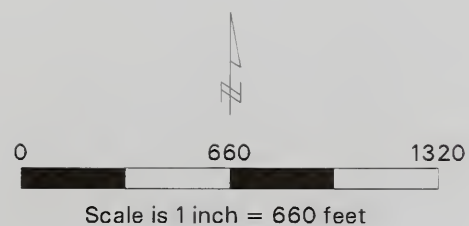
Concern: The unit is not accessible by road due to steep slopes.

Mitigation: Use helicopter logging to access the unit.

2003 Record of Decision Unit 88



- | | | | |
|--|-------------------------------|--|---------------------------|
| | Existing Managed Stands | | AHMU-Class 2 Streams |
| | Riparian Management Area | | AHMU-Class 3 Streams |
| | Beach Buffer | | AHMU-Class 4 Streams |
| | 2002 Record of Decision Units | | Existing Classified Roads |
| | Old-growth Reserves | | Existing Closed Roads |
| | Lakes | | Proposed Classified Roads |
| | Proposed Unit Boundaries | | Proposed Temporary Roads |
| | Adjacent Unit Boundaries | | 500-ft. Contour Interval |
| | AHMU-Class 1 Streams | | 100-ft. Contour Interval |
| | | | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	88b	Unit Size :	42 acres	
Aerial Photo:	1999 2398-88	Volume strata:	42	acres high
VCU:	452		0	acres medium
Land Use Designation:	Timber Production			
Within Inventoried Roadless Area?	Yes	Estimated timber volume:	450	mbf

Harvest Treatment: 50-66% retention, remove trees in 2-acre or less corridors north of the road, remove trees either in clumps or dispersed south of the road

Logging/Transportation Systems: Cable yarding / one temporary road

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type HC1

Streams 2 and 3 are Class III, Channel Type HC5

Mitigation: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

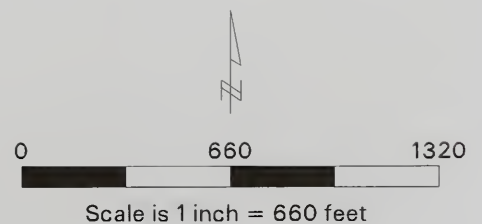
Concern: A temporary road provides access through the middle of the unit. Road 40822 will remain open to the junction with this road.

Mitigation: Remove all drainage structures from the temporary road after harvest to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

2003 Record of Decision Unit 88b



- | | | | |
|--|-------------------------------|--|---------------------------|
| | Existing Managed Stands | | AHMU-Class 2 Streams |
| | Riparian Management Area | | AHMU-Class 3 Streams |
| | Beach Buffer | | AHMU-Class 4 Streams |
| | 2002 Record of Decision Units | | Existing Classified Roads |
| | Old-growth Reserves | | Existing Closed Roads |
| | Lakes | | Proposed Classified Roads |
| | Proposed Unit Boundaries | | Proposed Temporary Roads |
| | Adjacent Unit Boundaries | | 500-ft. Contour Interval |
| | AHMU-Class 1 Streams | | 100-ft. Contour Interval |
| | | | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	90	Unit Size :	57	acres
Aerial Photo:	1999 2398-100	Volume strata:	35	acres high
VCU:	452		22	acres medium
Land Use Designation:	Scenic Viewshed, Modified Landscape			
Within Inventoried Roadless Area?	Yes	Estimated timber volume:	460	mbf

Harvest Treatment: 75% retention, remove trees in 2-acre or less openings

Logging/Transportation Systems: Cable yarding / two temporary roads, Road 40822

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type HC5

Mitigation: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

Concern: Road 40822 runs through this unit. Two temporary roads also access the unit.

Mitigation: After harvest, put Road 40822 into "storage" from the junction of the temporary road into Unit 88b to the last landing in this unit. Remove or bypass all drainage structures to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Concern: Waterfowl nesting may occur near the beaver pond on the southeast edge of the unit.

Mitigation: Timber harvest and other ground disturbing activities will not occur within 330 feet of the pond area from April 1 to July 31 if nesting waterfowl are present.

Concern: The unit contains high value deer winter habitat.

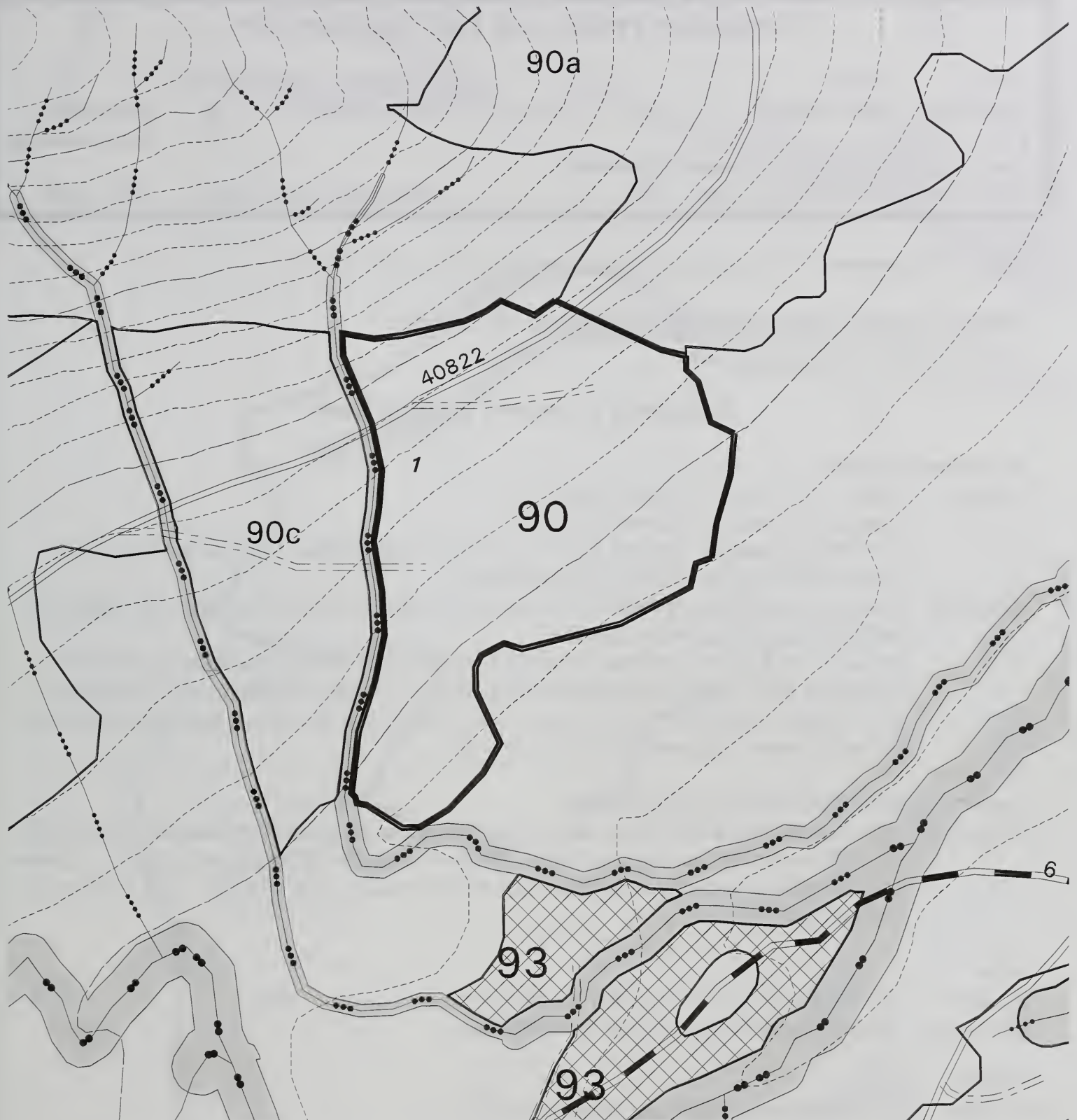
Mitigation: Retention of 75% of the stand will maintain winter habitat of a slightly lower quality. The stand will recover to full value in 40 years.


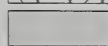





Scenery











Concern: The northern part of the unit is seen from South Blind Slough.

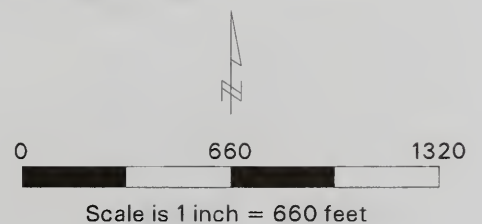
Mitigation: Retention of 75 percent of the stand will meet the Partial Retention VQO.

2003 Record of Decision Unit 90



-  Existing Managed Stands
-  Riparian Management Area
-  Beach Buffer
-  2002 Record of Decision Units
-  Old-growth Reserves
-  Lakes
-  Proposed Unit Boundaries
-  Adjacent Unit Boundaries
-  AHMU-Class 1 Streams

-  AHMU-Class 2 Streams
-  AHMU-Class 3 Streams
-  AHMU-Class 4 Streams
-  Existing Classified Roads
-  Existing Closed Roads
-  Proposed Classified Roads
-  Proposed Temporary Roads
-  500-ft. Contour Interval
-  100-ft. Contour Interval
-  Stream Numbers



Woodpecker Project Area Unit Card Narrative

Unit #:	90a	Unit Size :	103 acres	
Aerial Photo:	1999 2398-101	Volume strata:	38	acres high
VCU:	452		63	acres medium
Land Use Designation:	Scenic Viewshed			
Within Inventoried Roadless Area?	Yes	Estimated timber volume:	980	mbf

Harvest Treatment: 75% retention, remove trees in 2-acre or less corridors

Logging/Transportation Systems: Cable yarding / Road 40822

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class IV, Channel Type HC0

Stream 2 is Class IV, Channel Type HC1

Stream 3 is Class III, Channel Type HC5 flowing from a Class IV, Channel Type HC5

Stream 4 is Class III, Channel Type HC0/HC5

Mitigation: *Streams 1 and 2:* Apply BMP 13.16 (Stream Channel Protection). Use partial suspension and split line yarding where feasible.

Streams 3 and 4: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16. Where possible, leave reserve trees between the two streams at the northeast end of the unit.

Concern: Road 40822 runs through this unit.

Mitigation: After harvest, put Road 40822 into "storage" from the junction of the temporary road into Unit 88b to the last landing in this unit. Remove or bypass all drainage structures to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

Soils

Concern: The southwestern unit boundary is adjacent to steep slopes > 72%.

Mitigation: Modify boundary to avoid any unstable slopes.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

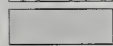
Concern: Most of the unit is seen from South Blind Slough.

Mitigation: Retention of 75% of the stand and screening from the small island in South Blind Slough will meet the Partial Retention VQO. Place corridors to avoid long openings.

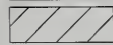
2003 Record of Decision Unit 90a



Existing Managed Stands



Riparian Management Area



Beach Buffer



2002 Record of
Decision Units



Old-growth Reserves



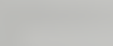
Lakes



Proposed Unit Boundaries



Adjacent Unit Boundaries



AHMU-Class 1 Streams



AHMU-Class 2 Streams



AHMU-Class 3 Streams



AHMU-Class 4 Streams



Existing Classified Roads



Existing Closed Roads



Proposed Classified Roads



Proposed Temporary Roads



500-ft. Contour Interval



100-ft. Contour Interval



Stream Numbers



0 660 1320

Scale is 1 inch = 660 feet

Woodpecker Project Area Unit Card Narrative

Unit #:	90c	Unit Size :	38	acres
Aerial Photo:	1999 2398-100	Volume strata:	26	acres high
VCU:	452		11	acres medium
Land Use Designation:	Modified Landscape			
Within Inventoried Roadless Area?	Yes	Estimated timber volume:	300	mbf

Harvest Treatment: 75% retention, remove trees in corridors north of Road 40822 and scattered trees south of the road

Logging/Transportation Systems: Cable yarding / Road 40822, a temporary road

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class IV, Channel Type HC0

Streams 2 and 3 are Class III, Channel Type HC5

Mitigation: *Stream 1:* Apply BMP 13.16 (Stream Channel Protection). Use partial suspension and split line yarding where feasible.

Streams 2 and 3: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16.

Concern: Road 40822 and one temporary road access this unit.

Mitigation: After harvest, put Road 40822 into "storage" from the junction of the temporary road into Unit 88b to the end of the road. Remove or bypass all drainage structures to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil. Close the temporary road and remove all drainage structures after harvest.

Soils

Concern: The northern unit boundary is adjacent to steep slopes > 72%.

Mitigation: Modify boundary to avoid any unstable slopes.

Wildlife

Concern: The unit contains high value marten habitat.

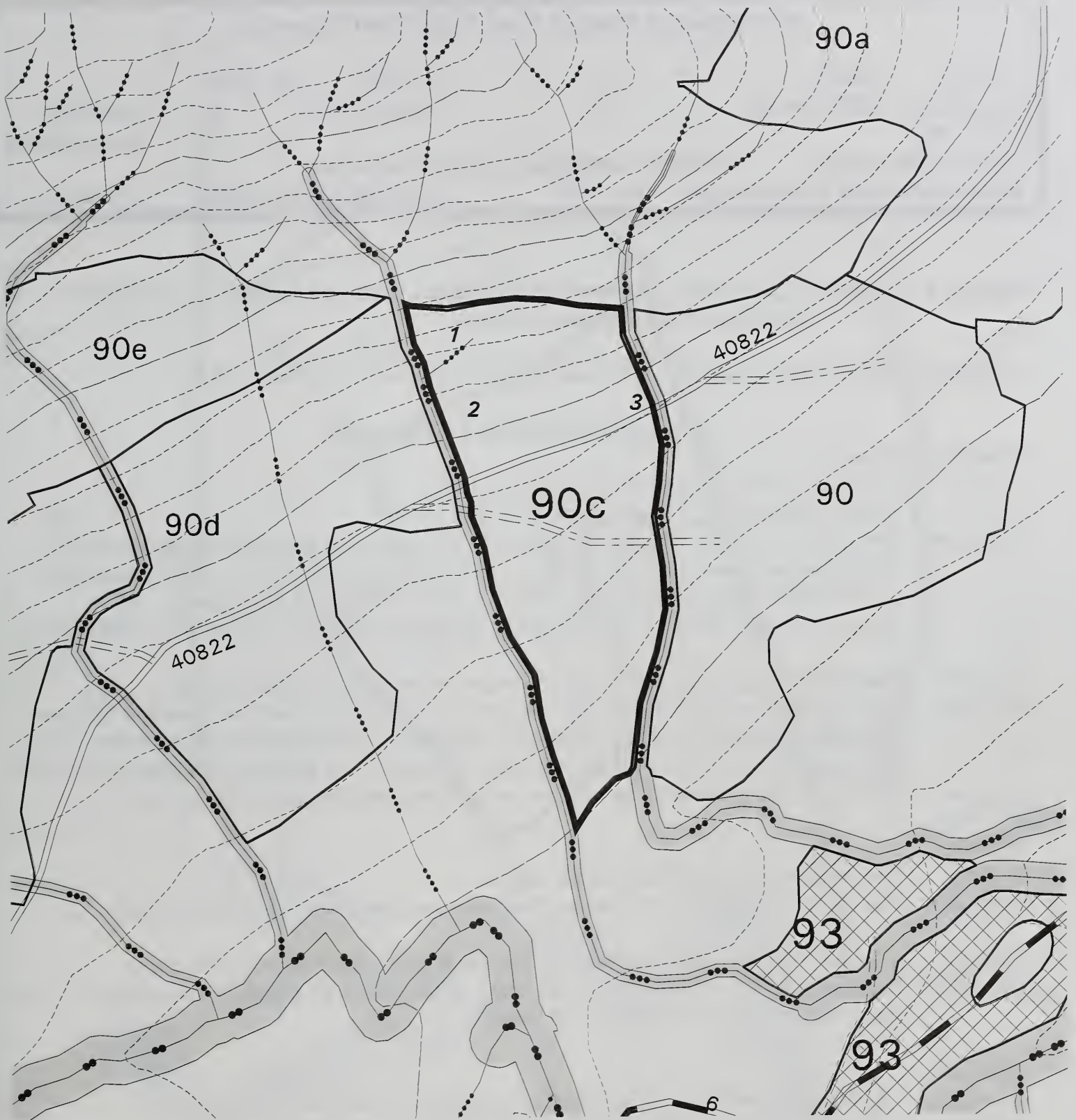
Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.


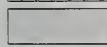


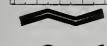

Vegetation











Concern: Location makes the stand susceptible to potential windthrow.

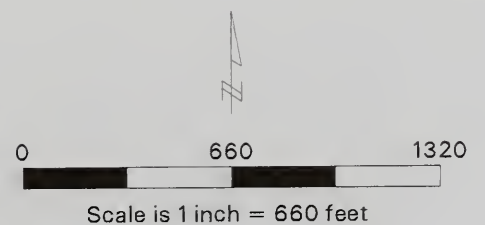
Mitigation: Trees displaying windfirm characteristics will be favored for retention.

2003 Record of Decision Unit 90c



-  Existing Managed Stands
-  Riparian Management Area
-  Beach Buffer
-  2002 Record of Decision Units
-  Old-growth Reserves
-  Lakes
-  Proposed Unit Boundaries
-  Adjacent Unit Boundaries
-  AHMU-Class 1 Streams

-  AHMU-Class 2 Streams
-  AHMU-Class 3 Streams
-  AHMU-Class 4 Streams
-  Existing Classified Roads
-  Existing Closed Roads
-  Proposed Classified Roads
-  Proposed Temporary Roads
-  500-ft. Contour Interval
-  100-ft. Contour Interval
-  Stream Numbers



Woodpecker Project Area Unit Card Narrative

Unit #:	90d	Unit Size :	51 acres	
Aerial Photo:	1999 2398-88	Volume strata:	21	acres high
VCU:	452		28	acres medium
Land Use Designation:	Modified Landscape, Timber Production			
Within Inventoried Roadless Area?	Yes	Estimated timber volume:	370 mbf	

Harvest Treatment: 75 % retention, remove trees in corridors north of Road 40822 and dispersed throughout the unit south of the road

Logging/Transportation Systems: Cable yarding / one temporary road, Road 40822

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Streams 1 and 3 are Class III, Channel Type HC5
Stream 2 is Class IV, Channel Type HC5

Mitigation: *Streams 1 and 3:* No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).
Stream 2: Apply BMP 13.16. Use partial suspension and split line yarding where feasible.

Concern: Road 40822 runs through this unit. A temporary road also accesses the unit.

Mitigation: After harvest, put Road 40822 into "storage" from the junction of the temporary road into Unit 88b to the end of the road. Remove or bypass all drainage structures to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil. Close the temporary road and remove all drainage structures after harvest.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Concern: The unit contains high value deer winter habitat in the southern part of the unit.

Mitigation: Retention of 75% of the stand will maintain winter habitat of a slightly lower quality. The stand will recover to full value in 40 years.



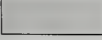



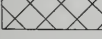



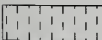





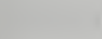


Vegetation

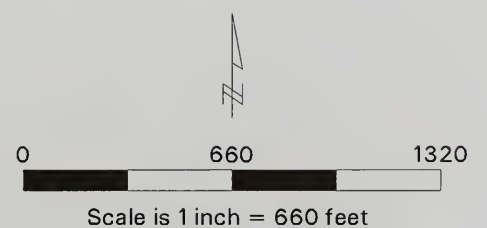
Concern: Location makes the stand susceptible to potential windthrow.

Mitigation: Trees displaying windfirm characteristics will be favored for retention.

2003 Record of Decision Unit 90d



- | | | | |
|--|-------------------------------|---|---------------------------|
|  | Existing Managed Stands |  | AHMU-Class 2 Streams |
|  | Riparian Management Area |  | AHMU-Class 3 Streams |
|  | Beach Buffer |  | AHMU-Class 4 Streams |
|  | 2002 Record of Decision Units |  | Existing Classified Roads |
|  | Old-growth Reserves |  | Existing Closed Roads |
|  | Lakes |  | Proposed Classified Roads |
|  | Proposed Unit Boundaries |  | Proposed Temporary Roads |
|  | Adjacent Unit Boundaries |  | 500-ft. Contour Interval |
|  | AHMU-Class 1 Streams |  | 100-ft. Contour Interval |
| | |  | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	90e	Unit Size :	31 acres	
Aerial Photo:	1999 2398-88	Volume strata:	14	acres high
VCU:	452		16	acres medium
Land Use Designation:	Scenic Viewshed, Modified Landscape, Timber Production			
Within Inventoried Roadless Area?	Yes	Estimated timber volume:	580	mbf

Harvest Treatment: 50-66% retention, remove trees dispersed throughout the unit

Logging/Transportation Systems: Helicopter yarding. Use landings on Road 40822 or Road 6282.

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Streams 1 and 2 are Class III, Channel Type HC5
Stream 3 is Class IV, Channel Type HC5

Mitigation: *Streams 1 and 2:* No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).
Stream 3: Apply BMP 13.16. Use partial suspension and split line yarding where feasible.

Soils

Concern: The northern unit boundary is adjacent to steep slopes > 72%.
Mitigation: Modify boundary to avoid any unstable slopes.

Wildlife

Concern: The unit contains high value marten habitat.
Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

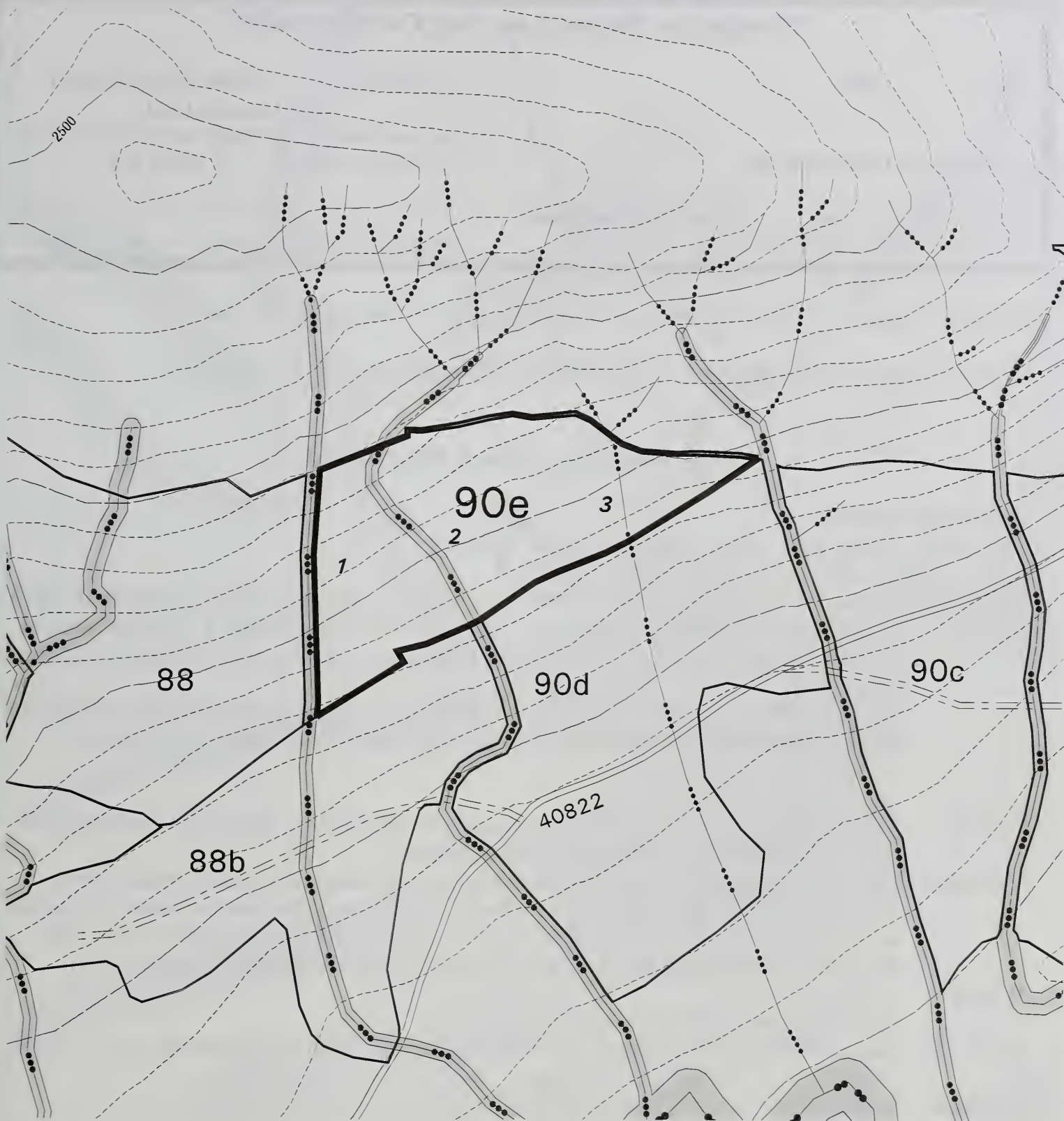
Vegetation

Concern: Location makes the stand susceptible to potential windthrow.
Mitigation: Trees displaying windfirm characteristics will be favored for retention.

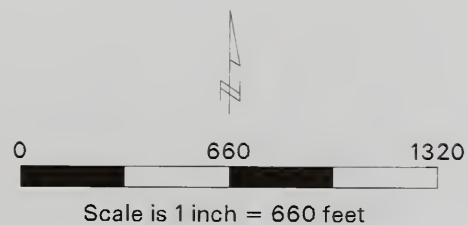
Transportation

Concern: The unit is not accessible by road due to steep terrain.
Mitigation: Use helicopter logging to access the unit.

2003 Record of Decision Unit 90e



- | | | | |
|--|-------------------------------|--|---------------------------|
| | Existing Managed Stands | | AHMU-Class 2 Streams |
| | Riparian Management Area | | AHMU-Class 3 Streams |
| | Beach Buffer | | AHMU-Class 4 Streams |
| | 2002 Record of Decision Units | | Existing Classified Roads |
| | Old-growth Reserves | | Existing Closed Roads |
| | Lakes | | Proposed Classified Roads |
| | Proposed Unit Boundaries | | Proposed Temporary Roads |
| | Adjacent Unit Boundaries | | 500-ft. Contour Interval |
| | AHMU-Class 1 Streams | | 100-ft. Contour Interval |
| | | | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	98	Unit Size :	2 acres (this Decision) 18 acres total (16 acres of this unit was approved in the 2002 ROD)
Aerial Photo:	1999 2398-155	Volume strata:	2 acres low
VCU:	452		
Land Use Designation:	Modified Landscape		
Within Inventoried Roadless Area?	Yes	Estimated timber volume:	35 mbf

Harvest Treatment: 50-66% retention, remove trees dispersed throughout the unit

Logging/Transportation Systems: Cable yarding / one temporary road and Road 6281

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class II, Channel Type HC1/MM1
Stream 2 is Class I, Channel Type HC1

Mitigation: *Stream 1:* No commercial timber harvest within 100'. No programmed commercial timber harvest within the Riparian Management Area, or 120'. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).
Stream 2: No commercial timber harvest within 100'. No programmed commercial timber harvest within the Riparian Management Area, or 100'. Apply BMPs 12.6, 12.6a, and 13.16.

Concern: A temporary road provides access to this unit from Road 6281. Road 6281 is presently closed to traffic due to alder growth on the roadway.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil. After harvest, close Road 6281 beyond the proposed recreation parking area at MP 0.5, remove all drainage structures past the parking site, and add waterbars as needed.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.



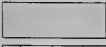

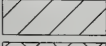











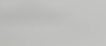


Wetlands

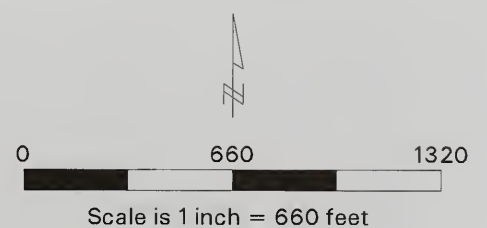
Concern: There are 9 acres of forested wetland within the southern half of the unit.

Mitigation: Avoid harvesting trees on areas that are unsuitable for timber production.

2003 Record of Decision Unit 98



- | | | | |
|--|-------------------------------|---|---------------------------|
|  | Existing Managed Stands |  | AHMU-Class 2 Streams |
|  | Riparian Management Area |  | AHMU-Class 3 Streams |
|  | Beach Buffer |  | AHMU-Class 4 Streams |
|  | 2002 Record of Decision Units |  | Existing Classified Roads |
|  | Old-growth Reserves |  | Existing Closed Roads |
|  | Lakes |  | Proposed Classified Roads |
|  | Proposed Unit Boundaries |  | Proposed Temporary Roads |
|  | Adjacent Unit Boundaries |  | 500-ft. Contour Interval |
|  | AHMU-Class 1 Streams |  | 100-ft. Contour Interval |
| | |  | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	109	Unit Size :	62 acres	
Aerial Photo:	1998 2198-27	Volume strata:	38	acres high
VCU:	452		24	acres medium
Land Use Designation:	Scenic Viewshed, Modified Landscape			
Within Inventoried Roadless Area?	No	Estimated timber volume:	570	mbf

Harvest Treatment: 50-66% retention, remove trees in 2-acre or less openings

Logging/Transportation Systems: Helicopter yarding. Use landings on Road 6283.

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class II, Channel Type HC1

Streams 2 and 3 are Class IV, Channel Type MM1

Stream 4 is a Class III, Channel Type HC2

Mitigation: *Stream 1:* No commercial timber harvest within 100'. No programmed commercial timber harvest within the Riparian Management Area or 100'. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).
Streams 2 and 3: Apply BMP 13.16. Use partial suspension and split line yarding where feasible.
Stream 4: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6, 12.6a, and 13.16.

Concern: Road 6283 is closed to traffic due to alder growth on the roadway, and will be reopened for timber harvest.

Mitigation: After harvest, close Road 6283, remove drainage structures and add waterbars as needed.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Concern: Maintain wildlife corridors between Old-growth Reserves.

Mitigation: Maintain stand structure for landscape connectivity between Old-growth Reserves.

Scenery

Concern: A portion of the unit is visible from Sumner Strait and the unit is visible in the background from Crystal Mountain.

Mitigation: Retention of at least 50% of the stand will meet the Partial Retention VQO.

Wetlands

Concern: There are 5 acres of muskeg/forested wetland mosaic along the south central boundary.

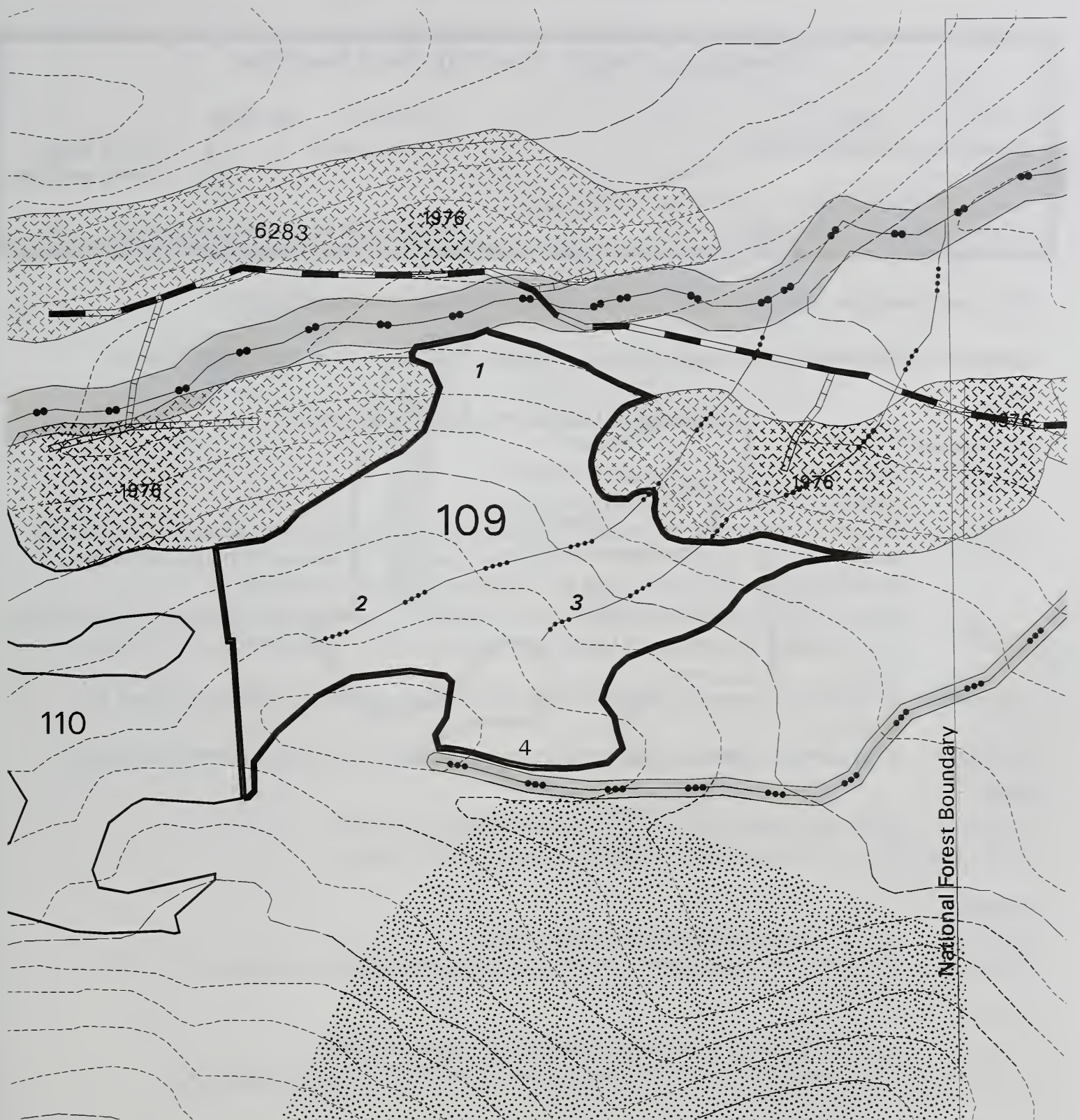
Mitigation: Design boundary during layout to avoid muskeg areas.

Transportation

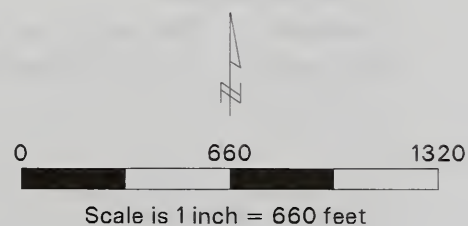
Concern: The unit is not accessible by road due to steep terrain.

Mitigation: Use helicopter logging to access the unit.

2003 Record of Decision Unit 109



- | | | | |
|--|-------------------------------|--|---------------------------|
| | Existing Managed Stands | | AHMU-Class 2 Streams |
| | Riparian Management Area | | AHMU-Class 3 Streams |
| | Beach Buffer | | AHMU-Class 4 Streams |
| | 2002 Record of Decision Units | | Existing Classified Roads |
| | Old-growth Reserves | | Existing Closed Roads |
| | Lakes | | Proposed Classified Roads |
| | Proposed Unit Boundaries | | Proposed Temporary Roads |
| | Adjacent Unit Boundaries | | 500-ft. Contour Interval |
| | AHMU-Class 1 Streams | | 100-ft. Contour Interval |
| | | | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	110	Unit Size :	56 acres	
Aerial Photo:	1998 2198-36	Volume strata:	8	acres high
VCU:	452		42	acres medium
Land Use Designation:	Modified Landscape			
Within Inventoried Roadless Area?	No	Estimated timber volume:	420	mbf

Harvest Treatment: 50-66% retention, remove trees dispersed throughout the unit

Logging/Transportation Systems: Helicopter yarding. Use landings on Road 6283.

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type HC3

Stream 2 is Class II, Channel Type HC1

Mitigation: *Stream 1:* No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

Stream 2: No commercial timber harvest within 100'. No programmed commercial timber harvest within the Riparian Management Area, or 100'. Apply BMPs 12.6, 12.6a, and 13.16.

Concern: Road 6283 is currently closed to traffic due to alder growth and will be reopened for harvest.

Mitigation: After harvest, close the road, remove drainage structures, and add waterbars as needed.

Soils

Concern: Areas with steep slopes (>72%) occur adjacent to the unit.

Mitigation: The unit was modified to exclude the area of steep slopes.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

Concern: The unit is visible in the background from Crystal Mountain.

Mitigation: Retention of at least 50% of the stand will meet the Partial Retention VQO.

Wetlands

Concern: There are 21 acres of muskeg/forested wetland scattered throughout the unit.

Mitigation: Avoid muskeg areas where practicable. Helicopter logging will achieve suspension to minimize damage.

Transportation

Concern: The unit is not accessible by road due to steep terrain.

Mitigation: Use helicopter to access the unit.

2003 Record of Decision Unit 110



Existing Managed Stands
 Riparian Management Area
 Beach Buffer
 2002 Record of Decision Units
 Old-growth Reserves
 Lakes
 Proposed Unit Boundaries
 Adjacent Unit Boundaries
 AHMU-Class 1 Streams



AHMU-Class 2 Streams
 AHMU-Class 3 Streams
 AHMU-Class 4 Streams
 Existing Classified Roads
 Existing Closed Roads
 Proposed Classified Roads
 Proposed Temporary Roads
 500-ft. Contour Interval
 100-ft. Contour Interval
 Stream Numbers



0 660 1320

Scale is 1 inch = 660 feet

Woodpecker Project Area Unit Card Narrative

Unit #:	117a	Unit Size :	8 acres	
Aerial Photo:	1999 2398-99	Volume strata:	8	acres high
VCU:	452		0	acres medium
Land Use Designation:	Modified Landscape			
Within Inventoried Roadless Area?	No	Estimated timber volume:	100	mbf

Harvest Treatment: 20-30% retention, leave trees scattered or in clumps

Logging/Transportation Systems: Cable yarding / Road 40821

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Road 40821 accesses the unit.

Mitigation: Put Road 40821 into "storage" after harvest is complete. Remove or bypass all drainage structures to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

Wildlife

Concern: The unit contains high value marten habitat.

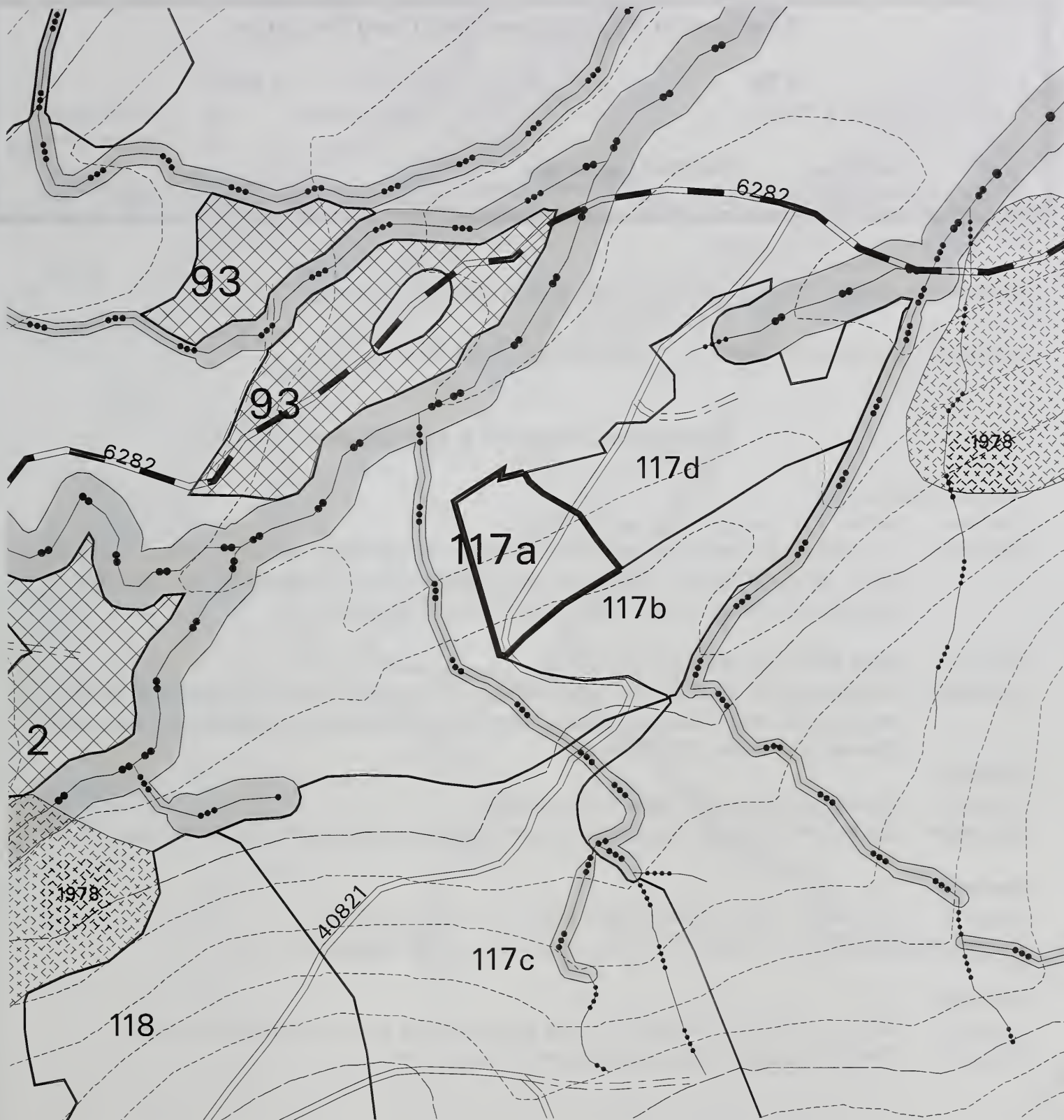
Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

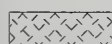
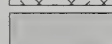





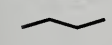

Scenery











Concern: The unit is visible in the background from Crystal Mountain.

Mitigation: Retention of at least 20% of the stand will meet the Modification VQO.

2003 Record of Decision Unit 117a



-  Existing Managed Stands
-  Riparian Management Area
-  Beach Buffer
-  2002 Record of Decision Units
-  Old-growth Reserves
-  Lakes
-  Proposed Unit Boundaries
-  Adjacent Unit Boundaries
-  AHMU-Class 1 Streams

-  AHMU-Class 2 Streams
-  AHMU-Class 3 Streams
-  AHMU-Class 4 Streams
-  Existing Classified Roads
-  Existing Closed Roads
-  Proposed Classified Roads
-  Proposed Temporary Roads
-  500-ft. Contour Interval
-  100-ft. Contour Interval
-  Stream Numbers

0 660 1320

Scale is 1 inch = 660 feet

Woodpecker Project Area Unit Card Narrative

Unit #:	117b	Unit Size :	14 acres	
Aerial Photo:	1999 2398-99	Volume strata:	0	acres high
VCU:	452		14	acres medium
Land Use Designation:	Modified Landscape			
Within Inventoried Roadless Area?	No	Estimated timber volume:	220	mbf

Harvest Treatment: 20-30% retention, leave trees scattered or in clumps

Logging/Transportation Systems: Cable yarding / Road 40821

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type HC6

Mitigation: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

Concern: Road 40821 runs through this unit.

Mitigation: Put Road 40821 into "storage" after harvest is complete. Remove or bypass all drainage structures to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

Concern: The unit is visible in the background from Crystal Mountain.

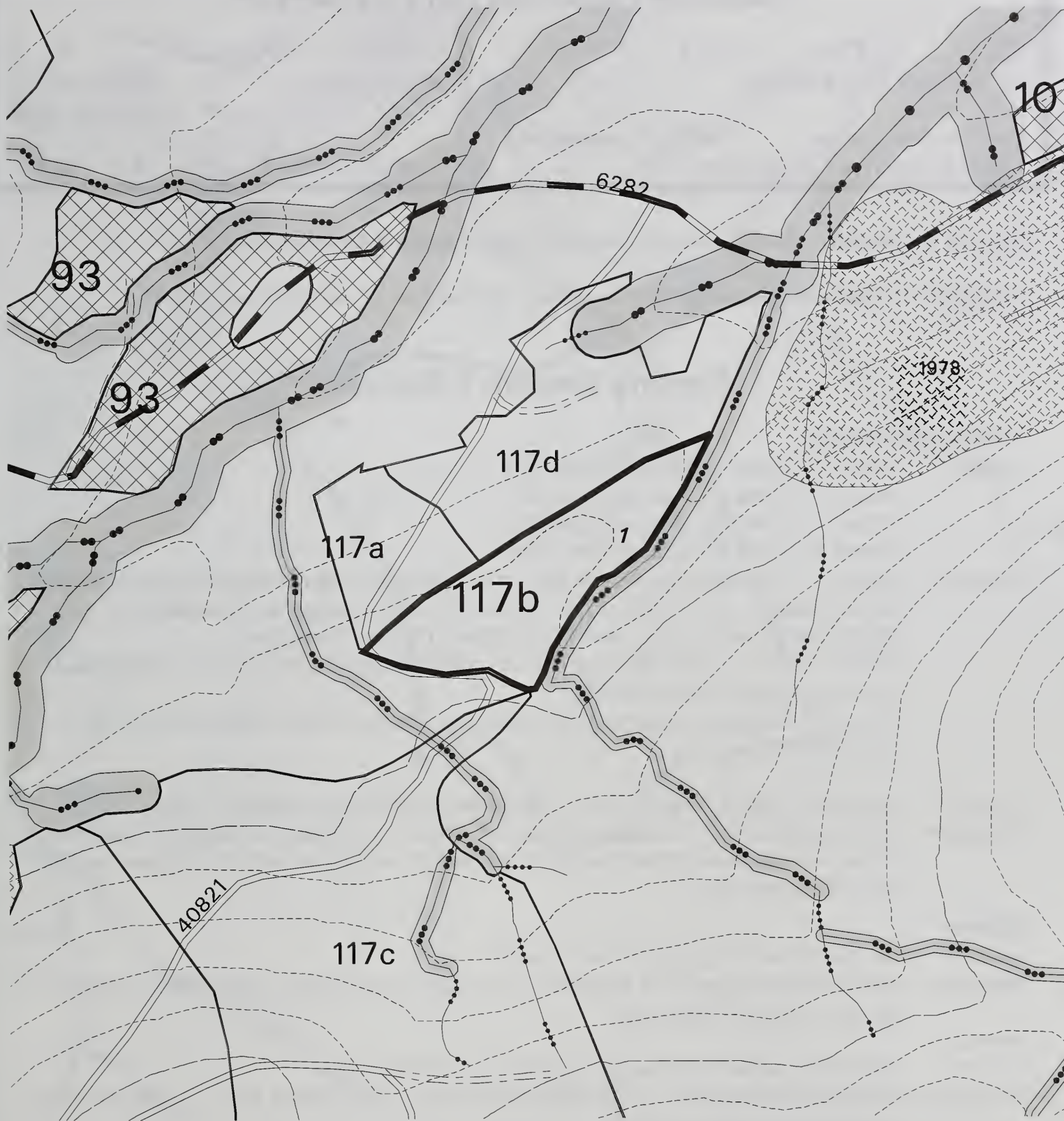
Mitigation: Retention of at least 20% of the stand will meet the Modification VQO.


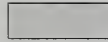

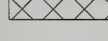



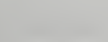
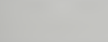
Wetlands











Concern: There are 6 acres of muskeg/forested wetland along the northwestern boundary.

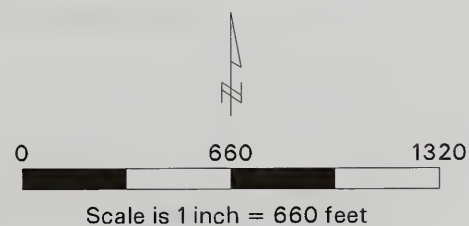
Mitigation: Design boundary during layout to avoid muskeg areas.

2003 Record of Decision Unit 117b



-  Existing Managed Stands
-  Riparian Management Area
-  Beach Buffer
-  2002 Record of Decision Units
-  Old-growth Reserves
-  Lakes
-  Proposed Unit Boundaries
-  Adjacent Unit Boundaries
-  AHMU-Class 1 Streams

-  AHMU-Class 2 Streams
-  AHMU-Class 3 Streams
-  AHMU-Class 4 Streams
-  Existing Classified Roads
-  Existing Closed Roads
-  Proposed Classified Roads
-  Proposed Temporary Roads
-  500-ft. Contour Interval
-  100-ft. Contour Interval
-  Stream Numbers



Woodpecker Project Area Unit Card Narrative

Unit #:	117c	Unit Size :	73 acres	
Aerial Photo:	1999 2398-98	Volume strata:	21	acres high
VCU:	452		49	acres medium
Land Use Designation:	Modified Landscape			
Within Inventoried Roadless Area?	No	Estimated timber volume:	620	mbf

Harvest Treatment: 50-66% retention, remove trees in 2-acre or less corridors

Logging/Transportation Systems: Cable yarding / one temporary road and Road 40821

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type HC2
Stream 2 is Class IV, Channel Type HC5
Stream 3 is Class IV, Channel Type HC6
Stream 4 is Class III, Channel Type PA1

Mitigation: *Stream 1:* No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).
Streams 2 and 3: Apply BMP 13.16. Use partial suspension and split line yarding and leave reserve trees where feasible.
Stream 4: Yard in a manner to reduce delivery of sediment from channel side slopes. Apply BMP 13.16

Concern: Road 40821 runs through this unit. A temporary road also accesses the unit.

Mitigation: Put Road 40821 into "storage" after harvest. Remove or bypass all drainage structures to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: Meet marten standards and guidelines in the high volume strata in the southwest portion of the unit. See unit folder map.

Scenery

Concern: The unit is visible in the background from Crystal Mountain.

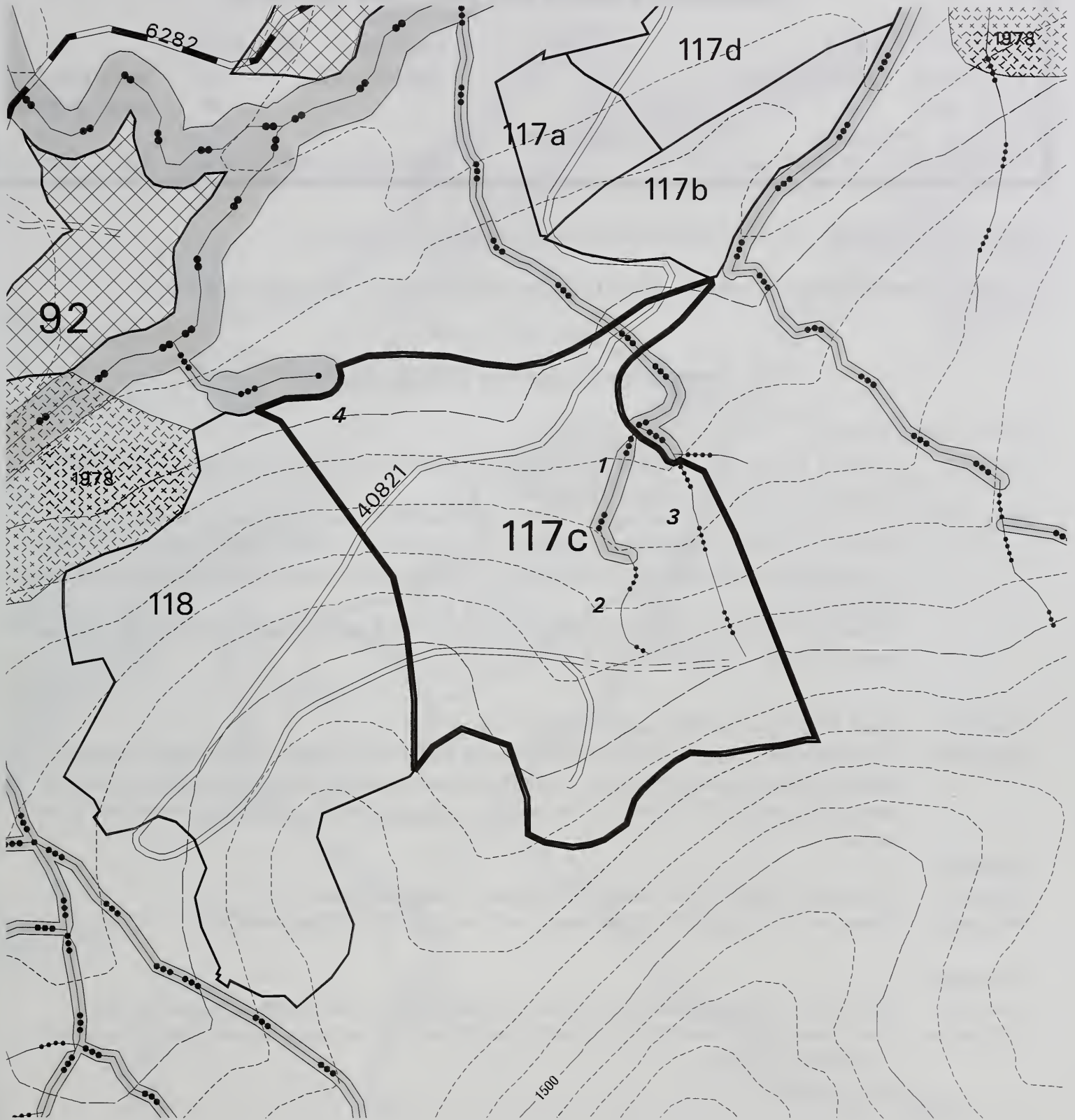
Mitigation: Retention of at least 50% of the stand will meet the Modification VQO. Avoid continuous corridors across the entire unit.

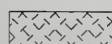
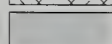





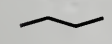

Wetlands











Concern: There are 15 acres of muskeg/forested wetland mosaic in the southern part of the unit and 19 acres in the northern part of the unit.

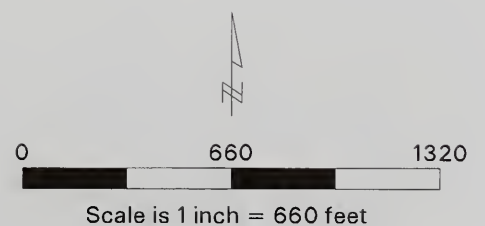
Mitigation: Avoid muskeg areas where practicable and do not harvest trees on areas that are unsuitable for timber production.

2003 Record of Decision Unit 117c



-  Existing Managed Stands
-  Riparian Management Area
-  Beach Buffer
-  2002 Record of Decision Units
-  Old-growth Reserves
-  Lakes
-  Proposed Unit Boundaries
-  Adjacent Unit Boundaries
-  AHMU-Class 1 Streams

-  AHMU-Class 2 Streams
-  AHMU-Class 3 Streams
-  AHMU-Class 4 Streams
-  Existing Classified Roads
-  Existing Closed Roads
-  Proposed Classified Roads
-  Proposed Temporary Roads
-  500-ft. Contour Interval
-  100-ft. Contour Interval
-  Stream Numbers



Woodpecker Project Area Unit Card Narrative

Unit #:	117d	Unit Size :	19 acres	
Aerial Photo:	1999 2398-99	Volume strata:	0	acres high
VCU:	452		19	acres medium
Land Use Designation:	Modified Landscape			
Within Inventoried Roadless Area?	No	Estimated timber volume:	190	mbf

Harvest Treatment: 20-30% retention, leave trees scattered or in clumps

Logging/Transportation Systems: Shovel yarding / one temporary road and Road 40821

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class II, Channel Type MM1 flowing from a Class IV, Channel Type MM1
Stream 2 is Class III, Channel Type HC6

Mitigation: *Stream 1:* No commercial timber harvest within 100'. No programmed commercial timber harvest within the Riparian Management Area, or 120'. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

Stream 2: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6, 12.6a, and 13.16.

Concern: Road 40821 and a temporary road access the unit.

Mitigation: Put Road 40821 into "storage" after harvest. Remove or bypass all drainage structures to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil. Close the temporary road and remove all drainage structures after harvest.

Scenery

Concern: The unit is visible in the background from Crystal Mountain.

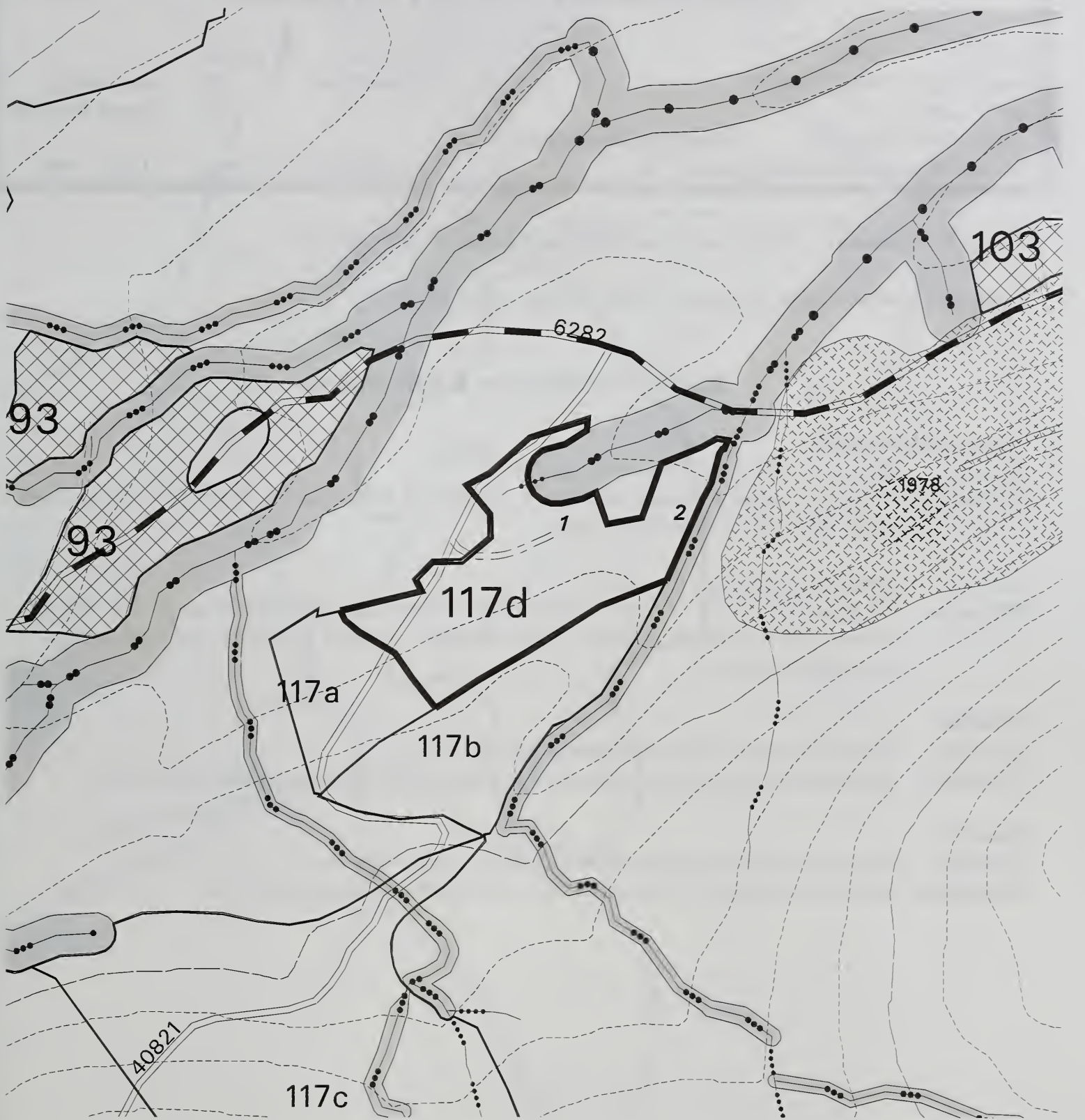
Mitigation: Retention of at least 20% of the stand will meet the Modification VQO.

Wetlands

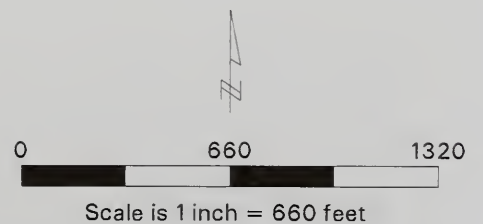
Concern: There are 7 acres of muskeg/forested wetland mosaic in the southern part of the unit.

Mitigation: Avoid muskeg areas where practicable and do not harvest trees on areas that are unsuitable for timber production.

2003 Record of Decision Unit 117d



- | | | | |
|--|-------------------------------|--|---------------------------|
| | Existing Managed Stands | | AHMU-Class 2 Streams |
| | Riparian Management Area | | AHMU-Class 3 Streams |
| | Beach Buffer | | AHMU-Class 4 Streams |
| | 2002 Record of Decision Units | | Existing Classified Roads |
| | Old-growth Reserves | | Existing Closed Roads |
| | Lakes | | Proposed Classified Roads |
| | Proposed Unit Boundaries | | Proposed Temporary Roads |
| | Adjacent Unit Boundaries | | 500-ft. Contour Interval |
| | AHMU-Class 1 Streams | | 100-ft. Contour Interval |
| | | | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	118	Unit Size :	59 acres	
Aerial Photo:	1999 2398-98	Volume strata:	32	acres high
VCU:	452		27	acres medium
Land Use Designation:	Modified Landscape			
Within Inventoried Roadless Area?	No	Estimated timber volume:	1235	mbf

Harvest Treatment: 20-30% retention, leave trees scattered or in clumps

Logging/Transportation Systems: Cable yarding / Road 40821

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type PA1

Mitigation: Yard in a manner to minimize delivery of sediment from channel side slopes. Apply BMP 13.16 (Stream Channel Protection).

Concern: Road 40821 accesses the unit.

Mitigation: Put Road 40821 into "storage" after harvest. Remove or bypass all drainage structures to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

Wildlife

Concern: The unit contains high value marten habitat.

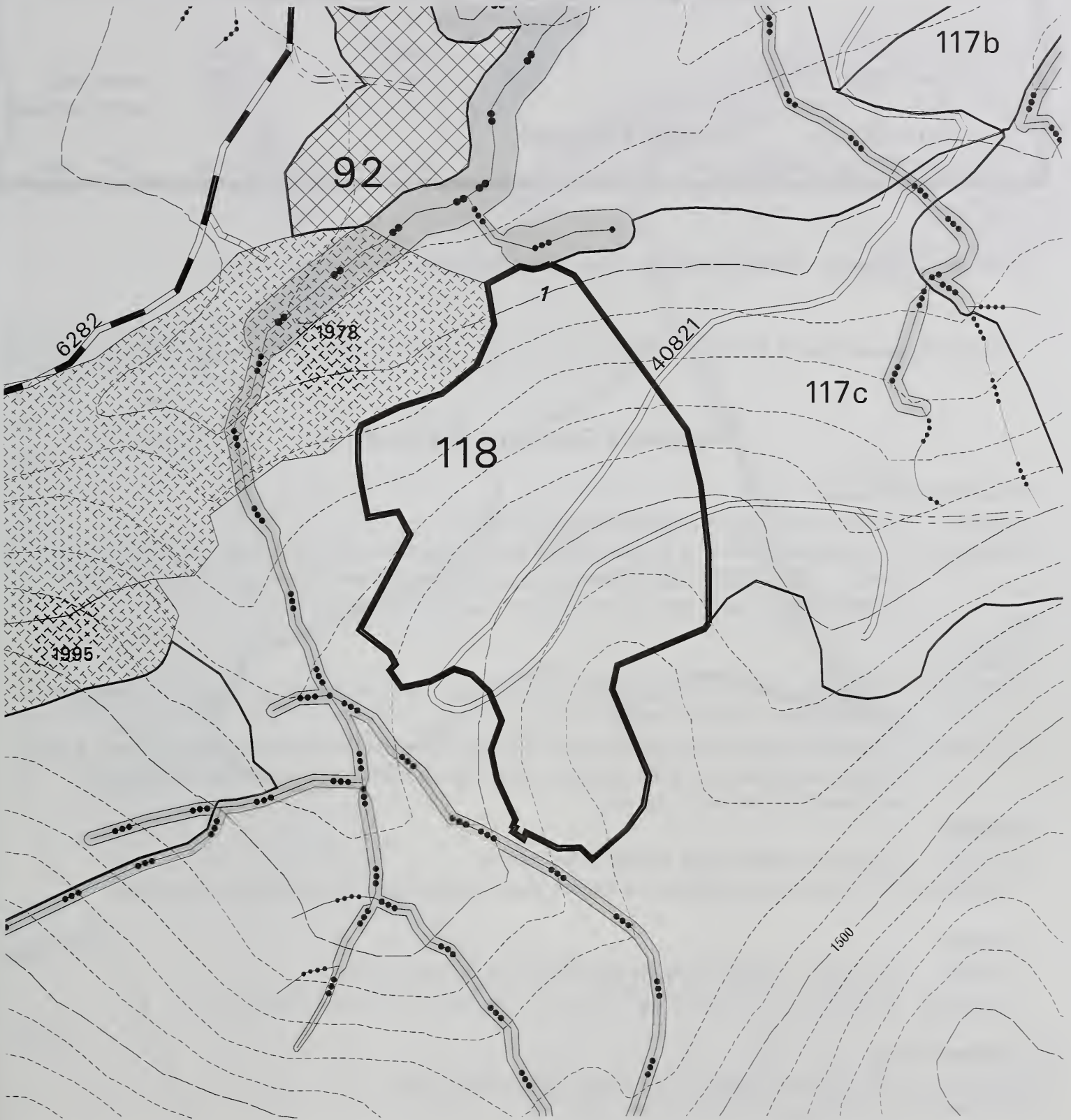
Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

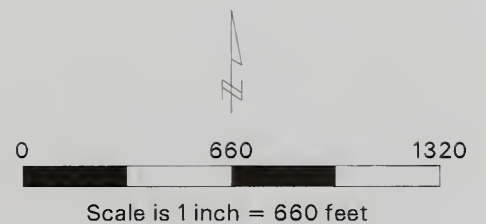
Concern: The unit is visible in the background from Crystal Mountain.

Mitigation: Retention of at least 20% of the stand will meet the Modification VQO.

2003 Record of Decision Unit 118



- | | | | |
|--|-------------------------------|--|---------------------------|
| | Existing Managed Stands | | AHMU-Class 2 Streams |
| | Riparian Management Area | | AHMU-Class 3 Streams |
| | Beach Buffer | | AHMU-Class 4 Streams |
| | 2002 Record of Decision Units | | Existing Classified Roads |
| | Old-growth Reserves | | Existing Closed Roads |
| | Lakes | | Proposed Classified Roads |
| | Proposed Unit Boundaries | | Proposed Temporary Roads |
| | Adjacent Unit Boundaries | | 500-ft. Contour Interval |
| | AHMU-Class 1 Streams | | 100-ft. Contour Interval |
| | | | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	119	Unit Size :	64 acres	
Aerial Photo:	1999 2398-91	Volume strata:	53	acres high
VCU:	452		11	acres medium
Land Use Designation:	Modified Landscape			
Within Inventoried Roadless Area?	No	Estimated timber volume:	610	mbf

Harvest Treatment: 50-66% retention, remove trees dispersed throughout the unit

Logging/Transportation Systems: Helicopter yarding. Use landings on Road 40822 or Road 6282.

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type HC5/HC6

Mitigation: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

Soils

Concern: The north central unit boundary is adjacent to an area of unstable slopes. The southeastern portion of the unit is on slopes >72%.

Mitigation: The north central unit boundary was modified to avoid the area of unstable slopes. Leave unmerchantable trees where possible and achieve full suspension when yarding the southeastern portion of the unit.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

Concern: The unit is visible in the background from Crystal Mountain.

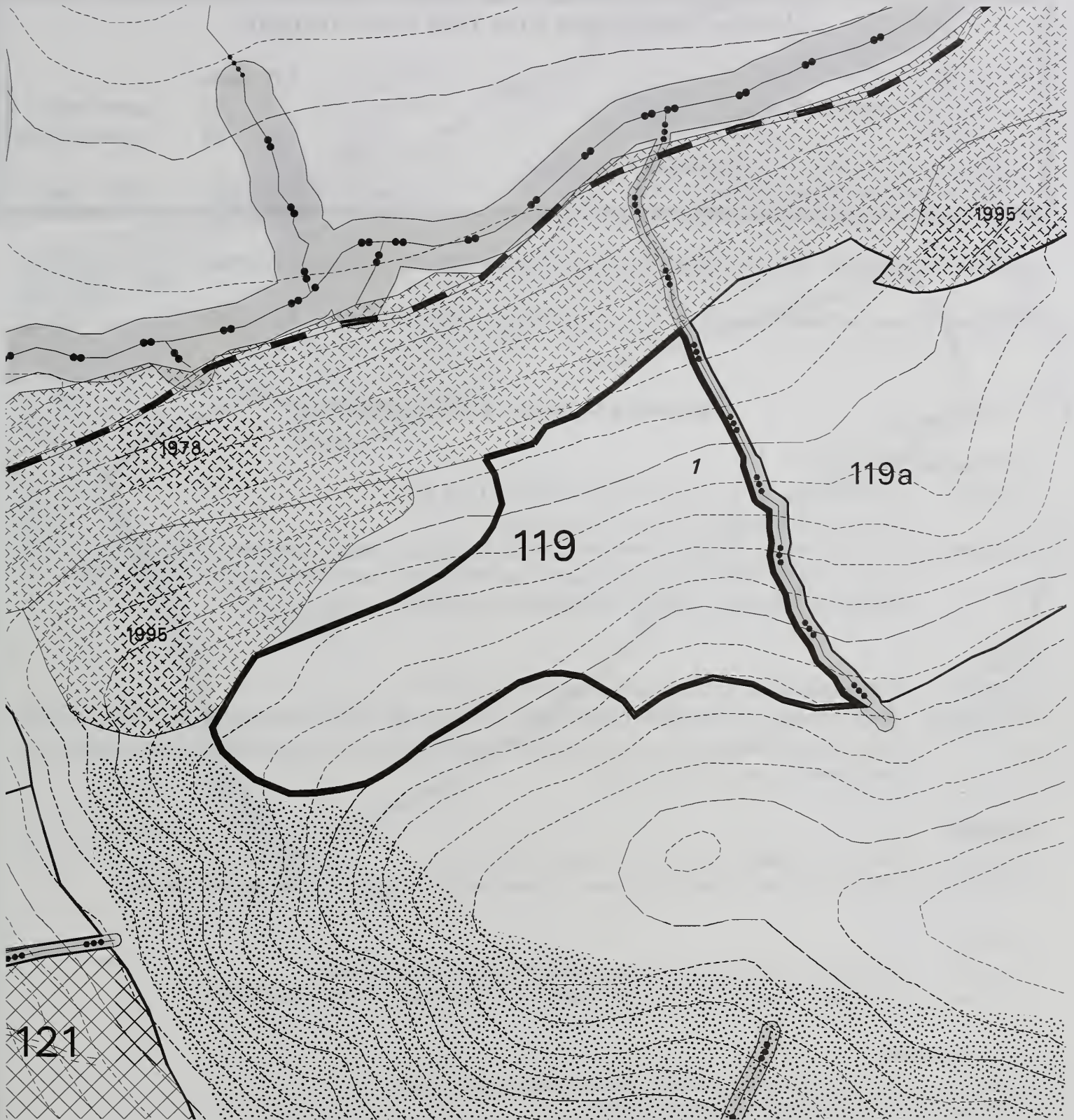
Mitigation: Retention of at least 50% of the stand will meet the Modification VQO.

Transportation

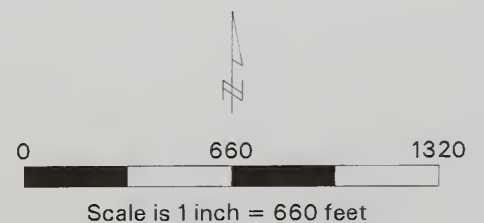
Concern: The unit is not accessible by road due to steep terrain.

Mitigation: Use helicopter to access the unit.

2003 Record of Decision Unit 119



- | | | | |
|--|-------------------------------|--|---------------------------|
| | Existing Managed Stands | | AHMU-Class 2 Streams |
| | Riparian Management Area | | AHMU-Class 3 Streams |
| | Beach Buffer | | AHMU-Class 4 Streams |
| | 2002 Record of Decision Units | | Existing Classified Roads |
| | Old-growth Reserves | | Existing Closed Roads |
| | Lakes | | Proposed Classified Roads |
| | Proposed Unit Boundaries | | Proposed Temporary Roads |
| | Adjacent Unit Boundaries | | 500-ft. Contour Interval |
| | AHMU-Class 1 Streams | | 100-ft. Contour Interval |
| | | | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #: 119a	Unit Size : 111 acres	
Aerial Photo: 1999 2398-91	Volume strata: 71	acres high
VCU: 452	40	acres medium
Land Use Designation: Modified Landscape		
Within Inventoried Roadless Area? No	Estimated timber volume: 1015	mbf

Harvest Treatment: 50-66% retention, remove trees dispersed throughout the unit

Logging/Transportation Systems: Helicopter yarding. Use landings on Road 6282.

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Streams 1, 2, and 3 are Class III, Channel Type HC5
Stream 4 is Class III, Channel Type HC6

Mitigation: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

Soils

Concern: The northwest corner of the unit is on slopes >72%.

Mitigation: A soil stability investigation found these slopes to be stable and suitable for timber harvest. Leave unmerchantable trees where possible and achieve full suspension when yarding the northwestern portion of the unit.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

Concern: The unit is visible in the background from Crystal Mountain.

Mitigation: Retention of at least 50% of the stand will meet the Modification VQO.



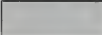







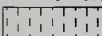





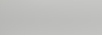


Transportation

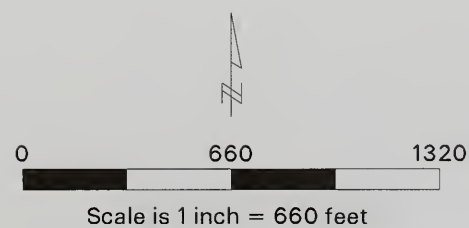
Concern: The unit is not accessible by road due to steep terrain.

Mitigation: Use helicopter to access the unit.

2003 Record of Decision Unit 119a



- | | | | |
|--|-------------------------------|---|---------------------------|
|  | Existing Managed Stands |  | AHMu-Class 2 Streams |
|  | Riparian Management Area |  | AHMu-Class 3 Streams |
|  | Beach Buffer |  | AHMu-Class 4 Streams |
|  | 2002 Record of Decision Units |  | Existing Classified Roads |
|  | Old-growth Reserves |  | Existing Closed Roads |
|  | Lakes |  | Proposed Classified Roads |
|  | Proposed Unit Boundaries |  | Proposed Temporary Roads |
|  | Adjacent Unit Boundaries |  | 500-ft. Contour Interval |
|  | AHMu-Class 1 Streams |  | 100-ft. Contour Interval |
| | |  | Stream Numbers |



Woodpecker Project Area Unit Card Narrative

Unit #:	122	Unit Size :	33 acres	
Aerial Photo:	1999 2398-26	Volume strata:	33	acres high
VCU:	452		0	acres medium
Land Use Designation:	Scenic Viewshed			
Within Inventoried Roadless Area?	No	Estimated timber volume:	350	mbf

Harvest Treatment: 75% retention, 2-acre or less corridors or V-shaped patches east of Road 6245. Remove trees in clumps or dispersed throughout the unit west of Road 6245.

Logging/Transportation Systems: Cable yarding / Road 6282 and one temporary road

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class I, Channel Type MC2
Stream 2 is Class II, Channel Type MC1

Mitigation: No commercial timber harvest within 100'. No programmed commercial timber harvest within the remainder of the Riparian Management Area, defined as the channel side-slope break. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

Concern: A temporary road accesses the unit.

Mitigation: Close the temporary road and remove all drainage structures after harvest.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The proposed harvest treatment meets marten standards and guidelines throughout the unit.

Concern: The unit contains high value deer winter habitat.

Mitigation: Retention of 75% of the stand will maintain winter habitat of a slightly lower quality. The stand will recover to full value in 40 years.

Vegetation

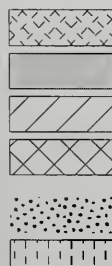
Concern: Location makes the stand susceptible to potential windthrow.

Mitigation: Trees displaying windfirm characteristics will be favored for retention.

Transportation

Opportunity: An extension of Road 6282 accesses the unit. This extension will remain open as part of a loop road connection between Roads 6282 and 6245.

2003 Record of Decision Unit 122



Existing Managed Stands
Riparian Management Area
Beach Buffer
2002 Record of Decision Units
Old-growth Reserves
Lakes
Proposed Unit Boundaries
Adjacent Unit Boundaries
AHMU-Class 1 Streams



AHMU-Class 2 Streams
AHMU-Class 3 Streams
AHMU-Class 4 Streams
Existing Classified Roads
Existing Closed Roads
Proposed Classified Roads
Proposed Temporary Roads
500-ft. Contour Interval
100-ft. Contour Interval
Stream Numbers

0 660 1320

Scale is 1 inch = 660 feet

Woodpecker Project Area Unit Card Narrative

Unit #:	122a	Unit Size :	19 acres	
Aerial Photo:	1999 2398-26	Volume strata:	19	acres high
VCU:	452		0	acres medium
Land Use Designation:	Scenic Viewshed			
Within Inventoried Roadless Area?	No	Estimated timber volume:	200	mbf

Harvest Treatment: 75% retention, 2-acre or less corridors or V-shaped patches east of Road 6245.
Remove trees in clumps or dispersed throughout the unit west of Road 6245.

Logging/Transportation Systems: Cable yarding / Road 6282

Resource Concerns & Mitigations

Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type HC5
Stream 2 is Class I, Channel Type MC2

Mitigation: *Stream 1:* No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).
Stream 2: No commercial timber harvest within 100'. No programmed commercial timber harvest within the Riparian Management Area, defined as the channel side-slope break. Apply BMPs 12.6, 12.6a, and 13.16.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The proposed harvest treatment meets marten standards and guidelines throughout the unit.

Concern: The unit contains high value deer winter habitat.

Mitigation: Retention of 75% of the stand will maintain winter habitat of a slightly lower quality. The stand will recover to full value in 40 years.

Scenery

Concern: A portion of the unit is visible from Sumner Strait.

Mitigation: Retention of 75% of the stand will meet the Partial Retention VQO.

Vegetation

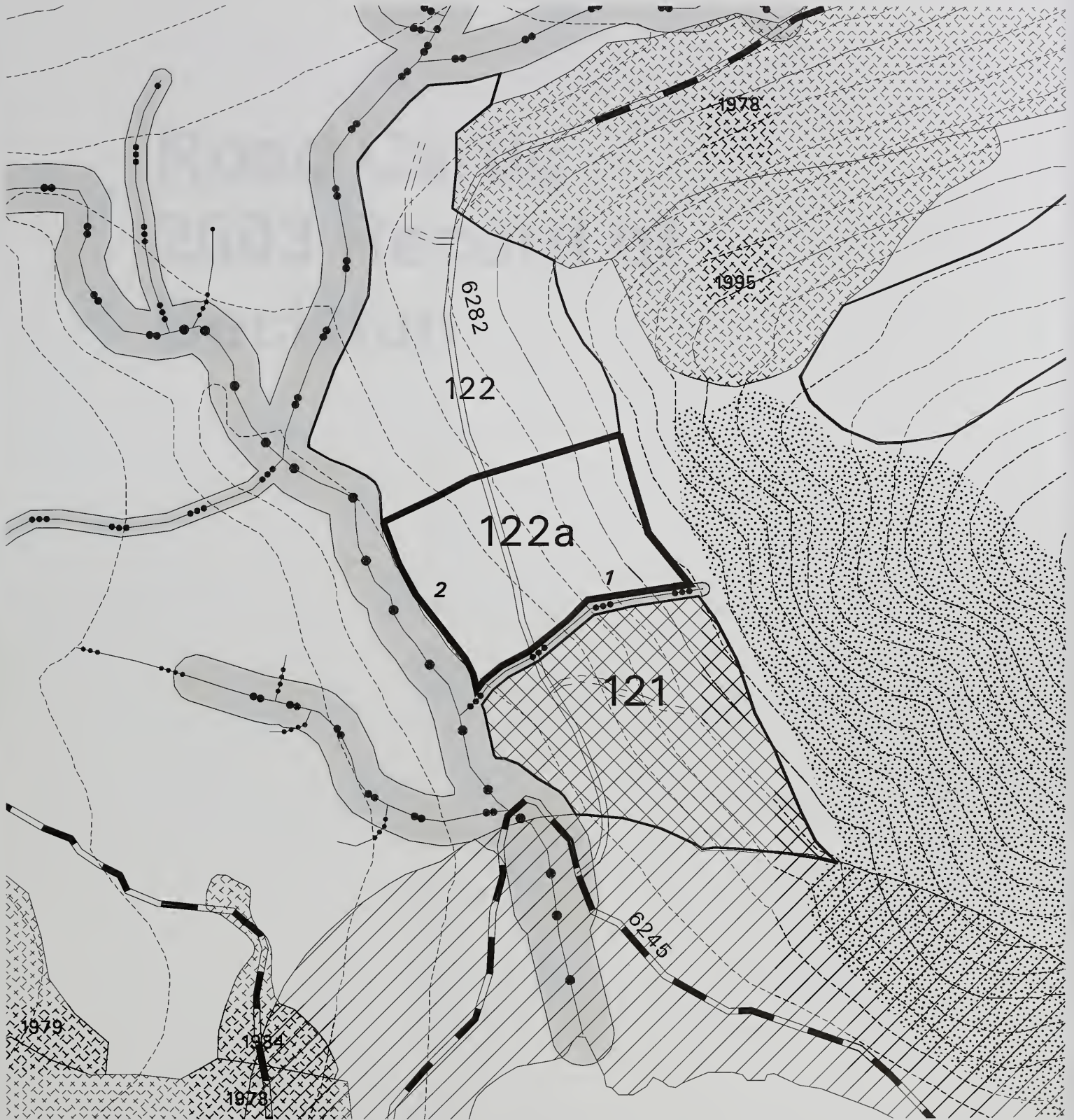
Concern: Location makes the stand susceptible to potential windthrow.

Mitigation: Trees displaying windfirm characteristics will be favored for retention.

Transportation

Opportunity: An extension of Road 6282 accesses the unit. This extension will remain open as part of a loop road connection between Roads 6282 and 6245.

2003 Record of Decision Unit 122a



- | | | | |
|--|-------------------------------|--|---------------------------|
| | Existing Managed Stands | | AHMU-Class 2 Streams |
| | Riparian Management Area | | AHMU-Class 3 Streams |
| | Beach Buffer | | AHMU-Class 4 Streams |
| | 2002 Record of Decision Units | | Existing Classified Roads |
| | Old-growth Reserves | | Existing Closed Roads |
| | Lakes | | Proposed Classified Roads |
| | Proposed Unit Boundaries | | Proposed Temporary Roads |
| | Adjacent Unit Boundaries | | 500-ft. Contour Interval |
| | AHMU-Class 1 Streams | | 100-ft. Contour Interval |
| | | | Stream Numbers |

0 660 1320

Scale is 1 inch = 660 feet



Road Cards 2003 Record of Decision

Road Cards

Road Cards
5008 Road Cards
Location

Road Management Objectives

Purpose and Use

The road management objectives (RMOs) presented in this appendix establish the intended purpose, and display design, maintenance, and operation criteria (as per FSH 7709.55), for each proposed new National Forest System road in the Woodpecker Project Area. The information on the RMO form is part of a permanent database that can be updated periodically as access needs, issues, and budgets change. A second section lists site-specific design criteria that will be used during design, construction, and initial monitoring of any road work proposed. A map is also included showing the proposed road location and identification of areas discussed in the site-specific design criteria. The map that follows this discussion shows existing and proposed road locations for the Woodpecker Project Area. The Road Management Objectives for the existing roads were approved in the 2002 Record of Decision.

General Design Criteria

The general design criteria provide various descriptions of the type of road, and the intended purpose and future use of the road. From this information, the maintenance and operation criteria can be developed. This information is critical for determining whether a Corps of Engineer's permit will be required for segments of road crossing wetlands. Roads built solely for silvicultural purposes do not require these permits.

Maintenance Criteria

The maintenance criteria include a discussion of how the road is to be maintained, centering on three strategies:

- **Active:** provide frequent cleanout of ditches and catch basins to assure controlled drainage. Control roadside brush to maintain sight distance. Grade as needed to maintain crown and running surface.
- **Storm Proof:** provide water bars, rolling dips, out sloping, etc., to assure controlled runoff until any needed maintenance can be performed on the primary drainage system. Control roadside brush to maintain passage.
- **Storage:** remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, revegetate.

The **active** maintenance strategy is applied to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. These roads are assigned Maintenance Level 3. The active maintenance strategy will also at times be applied to roads intended only for use by high clearance vehicles, or

Road Cards

Maintenance Level 2 roads. This will usually be the case when log haul is expected in the near future.

An intermediate maintenance strategy is to **storm proof**, or stabilize the road by providing roadway features such as drivable water bars, and out sloping to control runoff in case the primary drainage system of culverts and ditches is overwhelmed during a storm event. Each culvert will be evaluated as to where the water would go if the culvert were to fail to carry the high flow. A water bar or out slope at this location will minimize the potential of erosion of long stretches of ditch line or roadway. This is intended to be the primary maintenance strategy applied to roads assigned Maintenance Level 2.

Storage is intended to be the primary maintenance strategy on intermittent use roads during their closure cycle. Road Storage is defined in FSH 5409.17 as “the process/action of closing a road to vehicle traffic and placing it in a condition that requires minimum maintenance to protect the environment and preserve the facility for future use”. In this strategy, bridges and culverts on live streams are completely removed to restore natural drainage patterns. Cross drains and ditch relief culverts will be bypassed with deep water bars but may be left in place to minimize the cost of re-using these roads in the future. Roads in storage are left in a self-maintaining state in order to use more road maintenance funds on the open drivable roads on the island. Maintenance Level 1, closure and basic custodial maintenance, is assigned.

The interdisciplinary team went through a process to define road management considerations, leading to a maintenance strategy to be applied to each road in the Woodpecker Project Area. The map on the facing page shows the desired future condition of each road in the project area as a result of the process. The work needed to meet the objectives can be accomplished on the roads along the haul route in these timber sales. Work needed on other roads to meet the desired objective will be scheduled as funding allows.

Operation Criteria

The operation criteria include a presentation of each of the five traffic management strategies identified in FSM 7731 (encourage, accept, discourage, prohibit, and eliminate) to be applied to different traffic classes on each road. The traffic management narrative describes what actions will be taken in order to apply each strategy. For example, if the strategy “eliminate” is prescribed for standard passenger and high clearance vehicles, the narrative describes the method to accomplish this, such as removal of stream crossing structures, gating, etc.



Woodpecker Project Area

Road Management Objectives

Maintenance Strategy

- LEGEND**
- Closed Roads in Storage
 - Stormproofed, High Clearance Road
 - Active Maintenance, All Vehicle Road
 - Project Area Boundary
 - Streams
 - 500ft Contours
 - Non-National Forest System Lands
 - Lakes/Saltwater

Site Specific Design Criteria

The site-specific design criteria include road location objectives, wetland information, erosion control, proposed rock borrow sources and all streams within the project area with proposed construction or rehabilitation of stream crossing structures. The road location discussion documents why the road is proposed in a specific location, control points, and alternative routes considered (if any). A main location objective is to avoid crossing wetlands. At times, however, it is necessary to cross wetlands in order to minimize the total impact of a road. These areas are discussed, documenting areas of mapped wetlands and why the road is located across these areas. All fish streams are identified, as well as non-fish streams with sufficient flow to require a 48" or larger culvert. The stream crossing information describes the stream in enough detail to lead to a preliminary crossing structure recommendation and to evaluate the adequacy of the proposed structure.

Road Cards

GLOSSARY for RMO FORM VALUES:

Project	The name of the project or NEPA document that addresses the environmental impacts of this road.
Land Use Designation	SV = Scenic Viewshed; ML = Modified Landscape SA = Special Interest Area; OG = Old-growth Habitat Reserve TP = Timber Production
Route Number	Normally only long-term Forest Development Roads are assigned road numbers.
Route Name	All long-term roads assigned numbers will be given names.
Termini	The beginning and ending location of the road based on mileposts (mp).
Length (miles)	Best estimate of the length of road.
Functional Class	Arterial (A) = primary; Collector (C) = secondary; or Local (L) = tertiary.
Service Life	Short-term (less than 10 years) or Long-term. Long-term used in conjunction with Entry Cycle to be Long-term Constant (LC) or Long-term Intermittent (LI).
Width (ft)	Travelway width of road. Normal values are 14 ft and 16ft.
Design Speed (mph)	10, 20, or 30 mph.
Critical Vehicle	The largest vehicle (by weight, size or unique shape) whose limited use on the road is necessary to complete the planned activity.
Design Vehicle	The vehicle frequently using the road that determines the minimum standard for a particular design element - passenger car, pick-up, logging truck, lowboy, rock truck, or yarding equipment.
Intended Purpose	Brief description of why this road is needed.
Maintenance Criteria	Bmp – beginning milepost; Emp – ending milepost
Maintenance Levels-	Levels 1 through 5:
• Operational (Current Condition)	Level 1 - Closed, basic drainage maintenance Level 2 - High Clearance Vehicles
• Objective (Desired Future Condition)	Level 3 - All Vehicles, low user comfort Level 4 - All Vehicles, moderate user comfort Level 5 - All Vehicles, high user comfort
Alaska Forest Practices Act	Road status as specified by the Alaska Forest Resources and Practices Regulations, 1993; either Active, Inactive, or Closed.
Highway Safety Act	Road open to general public without restrictive gates, prohibitive signs, or regulation other than restrictions based on size, weight, or class of registration; Yes or No.
Travel Management Strategy	Several values apply; see the Travelway Classification/Operation Guide. Lists classes of traffic which will be encouraged, accepted, discouraged, prohibited, or eliminated.

2003 Woodpecker Record of Decision Road Cards

The Road Management Objectives for the existing classified roads that are needed for access to the 2003 Selected Alternative harvest units were approved in the 2002 Woodpecker Project Area Record of Decision (Table A-2). The following road cards (Table A-3) provide the information for the planned classified roads that need to be constructed to facilitate and reduce harvest costs for the units in this decision.

Table A-2. Summary of existing classified roads in the 2002 Record of Decision

Route Number	Begin Termini	End Termini	Operational Maintenance Level	Objective Maintenance Level
6245	MP 20.5 Mitkof Highway	MP 18.4	3	3
6282	MP 4.1 Road 6245	MP 4.36	3	3
6283	MP 5.2 Road 6245	MP 1.35	1	1

Table A-3. Summary of classified roads to be constructed in the 2003 Record of Decision

Route Number	Begin Termini	End Termini	Operational Maintenance Level	Objective Maintenance Level
6282	MP 4.36 Road 6282	MP 11.0 Road 6245	3	3
40821	MP 1.75 Road 6282	MP 1.84	2	1
40822	MP 3.3 Road 6282	MP 1.01	2	2
	MP 1.01 Road 40822	MP 2.2	1	1

Road Management Objective

Project		System	Land Use Designation
Woodpecker		Mitkof	SV
Route No.	Route Name	Begin Termini	End Termini
6282	Sumner Pass	MP 4.36 Rd 6282	MP 11 Rd 6245
Begin MP	Length	Status	Map Quarter Quad
4.36	0.75	Planned	PSG C-3
Photo year, roll, photos			
'99 2398-28-30, 2398-100-101			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LC	Shot rock	14'	10	Logging truck	Logging Truck

Intended Purpose/Future Use

Public access, recreation, general forest management and administration. Road will remain open to standard passenger vehicles.

Maintenance Criteria

Bmp	Emp	Operational Maintenance Level (Current or Planned Initial Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
4.36	5.11	3 (open to standard passenger vehicles)	3	Active

Maintenance Narrative

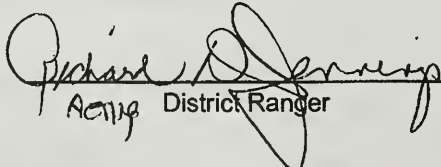
Active: Provide frequent cleanout of ditches and catch basins to assure controlled drainage. Control roadside brush, grade as needed to maintain crown and running surface.

Operation Criteria

Highway Safety Act:	Yes	Jurisdiction:	National Forest Ownership
Travel Management Strategies	Encourage:	N/A	
	Accept:	Standard passenger vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	N/A	

Travel Management Narrative

This road segment would complete a loop connecting Roads 6282 and 6245.

Approved  District Ranger

9/16/03
Date

Road Management Objective

Site Specific Design Criteria Road 6282

ROAD LOCATION: The road steadily loses elevation between the end of the existing Road 6282 and the intersection with existing Road 6245 at MP 11. The topography is gentle, except for two V-notch control points, one on the north and one on the south entrance into Unit 121.

WETLANDS: The road location crosses no mapped wetlands (BMP 12.5). Most of this road segment would be constructed as a timber access road; however, the timber purchaser may not need the loop completed for log haul. The last segment needed to complete the loop may be constructed under a public works contract.








SCENERY: The road may be seen from Sumner Strait. Seed or plant alder on cut banks. Trees retained within the harvest unit may provide screening.





EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: There are visual concerns along this segment, therefore no new rock pits will be allowed on this extension of Road 6282.

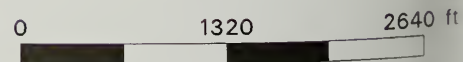
STREAM CROSSINGS: There are no stream crossings that require site-specific design consideration for volume of flow, fish habitat, or other design complexity.



-  Existing Classified Roads
-  Existing Closed Roads
-  Proposed Classified Roads
-  Unit Boundary
-  Proposed Temporary Roads
-  AHMU-Class I
-  AHMU-Class II

-  AHMU-Class III
-  AHMU-Class IV
-  500ft Contours
-  2002 Record of Decision Units

RD_6282



Scale is 1 inch = 1320 feet

Road Management Objective

Project		System	Land Use Designation
Woodpecker		Mitkof	ML
Route No.	Route Name	Begin Termini	End Termini
40821	High Pass	MP 1.75 Rd. 6282	MP 1.84
Begin MP	Length	Status	Map Quarter Quad
0.0	1.84	Planned	PSG C-3
			Photo year, roll, photos
			'99 2398-97-99

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Logging Truck	Logging Truck

Intended Purpose/Future Use

The road is used for access for silvicultural activities. This road will be extended in the future, to access timber along the slope to the south. The road will be placed into storage after timber harvest to minimize wildlife impacts and reduce maintenance needs.

Maintenance Criteria

Bmp	Emp	Operational Maintenance Level (Current or Planned Initial Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	1.84	2	1	Closed

Maintenance Narrative

Storage: remove or bypass all drainage structures to restore natural drainage patterns, add waterbars as needed to control runoff, re-vegetate.

Operation Criteria

Highway Safety Act: No Jurisdiction: National Forest Ownership

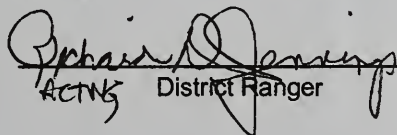
Travel Management Strategies

Encourage: N/A
 Accept: Hikers
 Discourage: motorized vehicles
 Prohibit: N/A
 Eliminate: N/A

Travel Management Narrative

By removing crossing structures, most motorized vehicle use will be eliminated. Restore crossings when needed in the future.

Approved


 ACTING District Ranger

9.16.03

Date

Road Management Objectives

Site Specific Design Criteria Road 40821

ROAD LOCATION: The road steadily gains elevation along a north-facing slope in order to reach a switchback and a high bench area.

WETLANDS: Road location was completed to avoid wetlands wherever practicable. Wetlands were unavoidable on some portions of the location due to safety, engineering design constraints and considerations for other resources. Alternatives to the location on wetlands would mean longer higher cost roads that may have impacted similar areas of wetlands. High value wetlands (fens) were particularly avoided wherever practicable.

The first 500 feet crosses a muskeg/forested wetland mosaic (BMP 12.5). The location is here to avoid open muskeg on each side and to use a flat ridge location versus the slope to the south above an AHMU Class II stream. An area of muskeg/forested wetland is crossed between Units 117b and 117c. Approximately 1,000 feet long, the location is here to reach a stable crossing of the stream at point A. A short section of muskeg/forested wetland is crossed at point B since the gentle terrain in this area allows room for a switchback with less environmental impacts than on steeper forested slopes. A 400-foot section of forested upland/wetland mosaic crossed near the end of the road is controlled by topography and grade restrictions.

SCENERY: The road may be seen from Crystal Mountain. Screen with trees where possible and seed or plant alder on cutbanks.

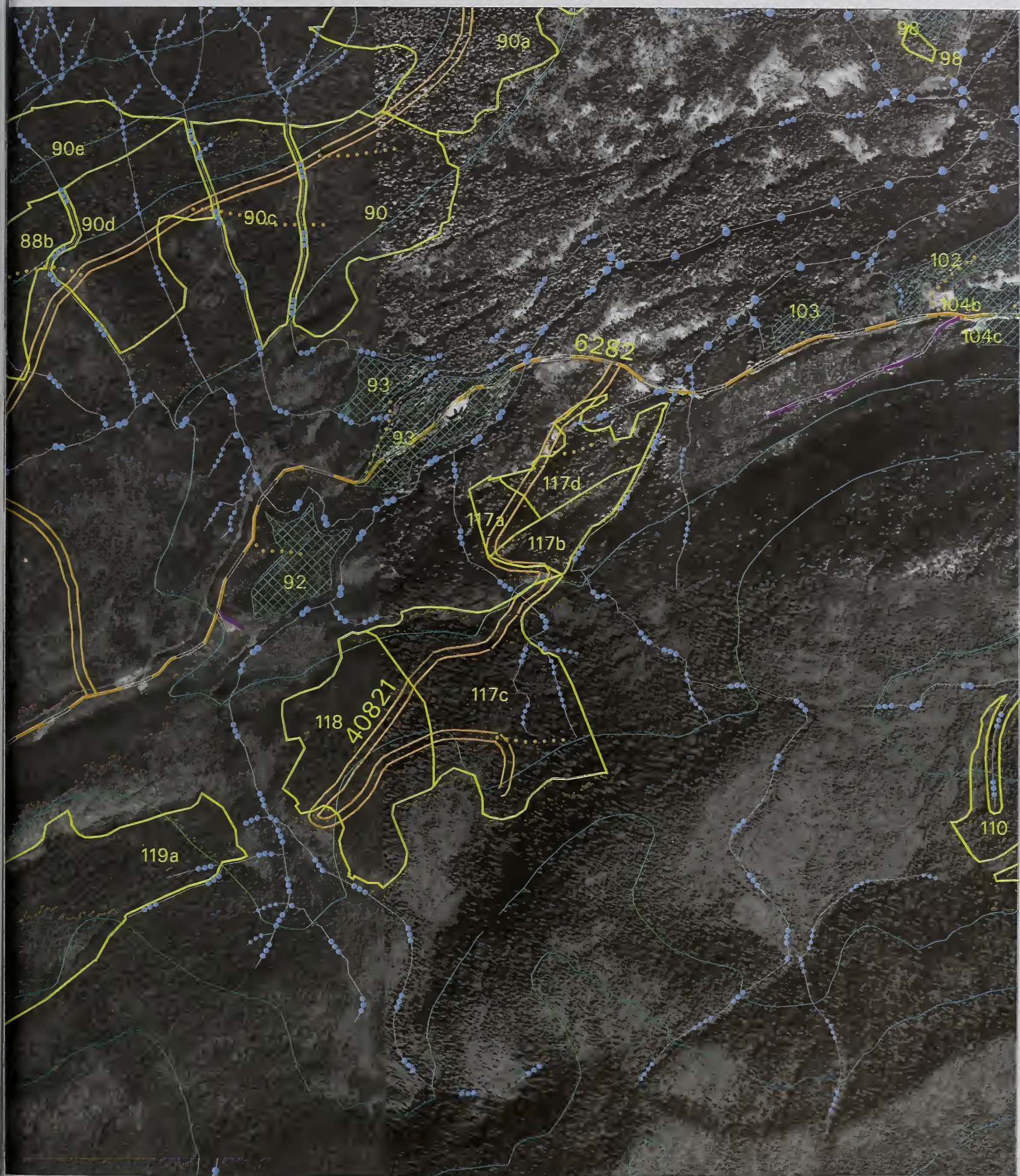
EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

ROCK PITS: During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Screen rock pits from view from Crystal Mountain.

STREAM CROSSINGS:

MP <u>0.74</u> AHMU <u>III</u> Channel Type <u>HC5</u> BF Width <u>12ft</u>	BF Depth <u>1 ft</u> Incision <u>5 ft</u> Substrate <u>gravel to 1 ft cobble</u>	Gradient <u>5%</u> Structure <u>12m panel</u> <u>bridge</u>
---	--	---

Narrative: Large woody debris in stream holding gravel, little bedload movement.



Existing Classified Roads
 Existing Closed Roads
 Proposed Classified Roads
 Unit Boundary
 Proposed Temporary Roads
 AHMU-Class I
 AHMU-Class II



AHMU-Class III
 AHMU-Class IV
 500ft Contours
 2002 Record of
 Decision Units

RD_40821

0 1320 2640 ft

Scale is 1 inch = 1320 feet

Road Management Objective

Project		System	Land Use Designation
Woodpecker		Mitkof	TP, ML, SV
Route No.	Route Name	Begin Termini	End Termini
40822	Upper Sumner	MP 3.3 Rd. 6282	MP 2.19
Begin MP	Length	Status	Map Quarter Quad
0.0	2.19	Planned	PSG C-3
			Photo year, roll, photos
			'99 2398-28-29, 2398-97-101

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Logging Truck	Logging Truck

Intended Purpose/Future Use

Access for silvicultural activities. Will be extended in the future, accessing timber along the slope to the north. Close road after timber harvest at junction of temporary road to west to minimize wildlife displacement and reduce maintenance needs.

Maintenance Criteria

Bmp	Emp	Operational Maintenance Level (Current or Planned Initial Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	1.01	2	2	Inactive
1.01	2.19	1	1	Closed

Maintenance Narrative

Storm proof first segment to junction of temporary road to west. Storage on remainder of road: remove or bypass all drainage structures to restore natural drainage patterns, add waterbars as needed to control runoff, re-vegetate.

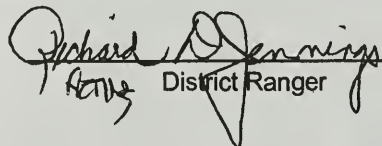
Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest Ownership
Travel Management Strategies	Encourage: Accept: Discourage: Prohibit: Eliminate:	N/A Hikers Standard passenger vehicles on first 1.01 miles N/A Standard passenger and high clearance vehicles beyond MP 1.01.	

Travel Management Narrative

By removing crossing structures, most motorized vehicle use will be eliminated. Restore crossings when needed in the future.

Approved


District Ranger

9.16.03
Date

Road Management Objectives

Site Specific Design Criteria

Road 40822

ROAD LOCATION: The objective of the road location is to access the south-facing slope north of the existing Road 6282 from the highest point on Road 6282. The main control point in crossing the valley from south to north is a main branch of Sumner Creek at Point A. This branch becomes a deep and wide V-notch below the proposed crossing, whereas the proposed crossing is a fairly simple bridge site. The south-facing slope affords several benches for landings. The road can be extended in the future to access timber to the north.

WETLANDS: Road location was completed to avoid wetlands wherever practicable. Wetlands were unavoidable on some portions of the location due to safety, engineering design constraints and considerations for other resources. Alternatives to the location on wetlands would mean longer higher cost roads that may have impacted similar areas of wetlands. High value wetlands (fens) were particularly avoided wherever practicable.

The first 500 feet crosses a soil type mapped as muskeg wetland (BMP 12.5). The road location is here because this is the highest elevation on Road 6282 in which to access the bridge site at point A. A segment approximately 2,500 feet long of muskeg/forested wetland mosaic including the bridge site at point A was unavoidable due to the need to reach point A, a relatively simple crossing of a wide, deep V-notch below the bridge site. A 400-foot segment of the road crosses forested wetland on the east border of Unit 90d because of the gentle terrain it provides as opposed to the steeper side slopes above.

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

ROCK PITS: During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). There may be visual concerns along this road from midway through Unit 90 to the end of the road.

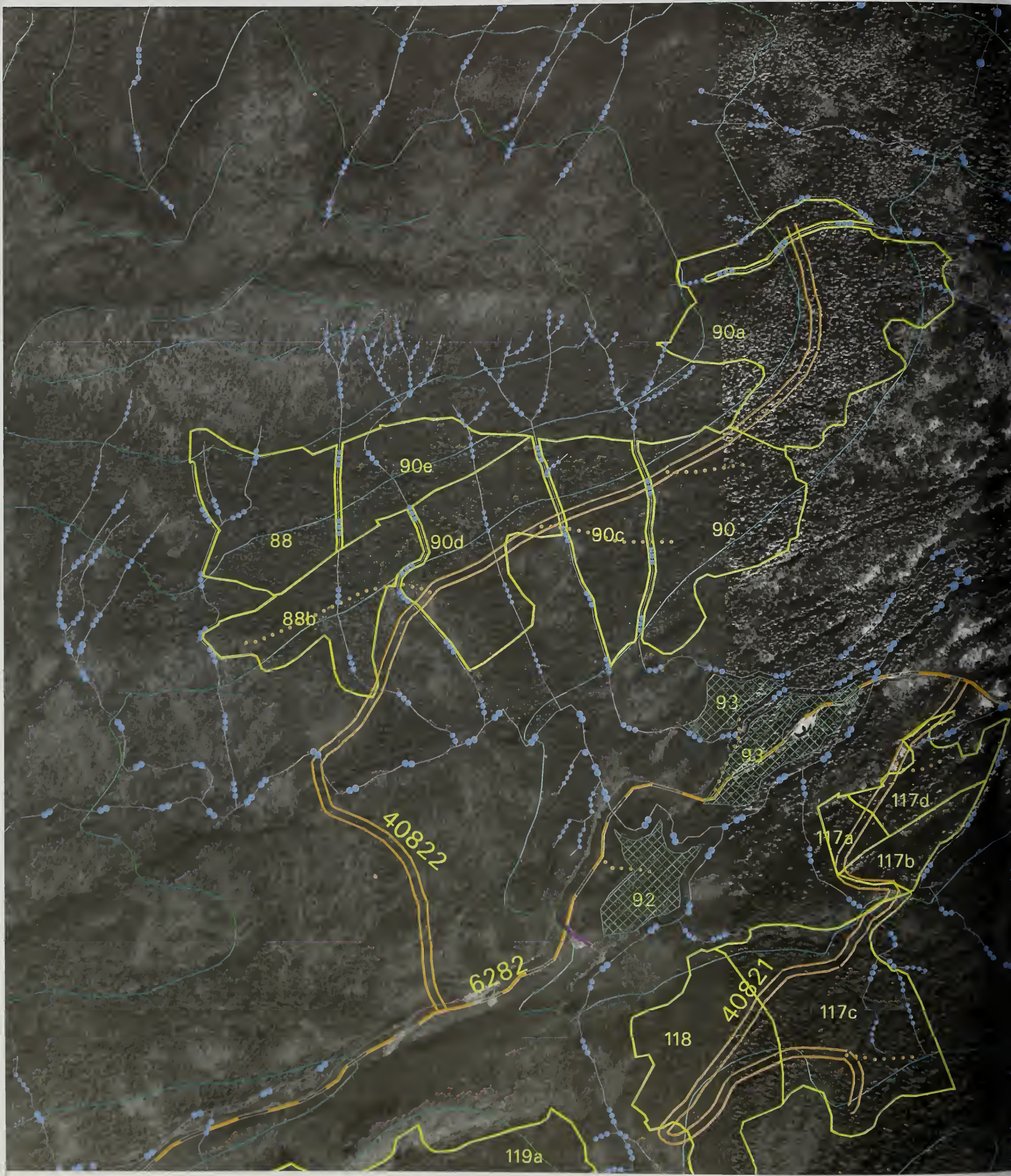
STREAM CROSSINGS:

A) MP <u>0.59</u> AHMU <u>II</u>	Channel Type <u>HC4</u>	BF Width <u>14 ft</u>
BF Depth <u>3 ft</u>	Substrate <u>bedrock, cobble</u>	Structure <u>12 m Panel Bridge</u>
Incision <u>5 ft</u>	Gradient <u>8%</u>	

Narrative: Very little bedload movement, mostly bedrock, becomes a 50-foot-deep V-notch 200 feet downstream. No timing required.

B) MP <u>0.76</u> AHMU <u>III</u>	BF Depth <u>1 ft</u>	Gradient <u>8%</u>
Channel Type <u>HC5</u>	Incision <u>4 ft</u>	Structure <u>81" x 59" CMPA</u>
BF Width <u>6 ft</u>	Substrate <u>gravel</u>	

Narrative: No timing required.

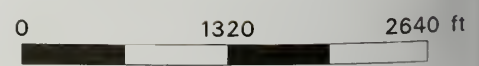


- Existing Classified Roads
- Existing Closed Roads
- Proposed Classified Roads
- Unit Boundary
- Proposed Temporary Roads
- AHMU-Class I
- AHMU-Class II



- AHMU-Class III
- AHMU-Class IV
- 500ft Contours
- 2002 Record of Decision Units

RD_40822



Scale is 1 inch = 1320 feet

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means of communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal employment opportunity provider and employer.

**USDA Forest Service
Petersburg Ranger District, Tongass National Forest
PO Box 1328
Petersburg, AK 99833**

**OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300**

**PRIORITY MAIL
POSTAGE & FEES PAID
USDA F.S./JUNEAU, AK
PERMIT NO. G-40**
